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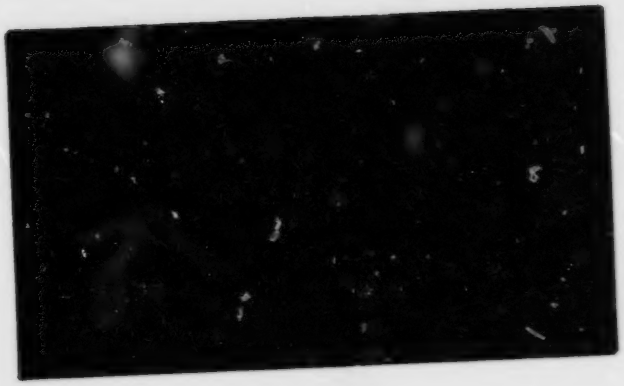

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LIE DETECTION AND PLETHYSMOGRAPHY: THEIR USES AND LIMITATIONS IN OFFENDER ASSESSMENT

No. 1986-38

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This working paper is available in French. Ce document de travail est disponible en français.

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A) ABSTRACT

Erectile assessments of sexual preference have been found quite reliable. Their validity, however, has been questioned with some findings that are at variance with the clinical data. Distorted results can be caused by faking, which is the act of feigning a spurious positive response to a non-preferred stimulus, and by suppressing, which is the inhibition of a response to one's natural sexual preference.

In this study, phallometric testing with a mercury-in-rubber strain gauge and Model 240 Parks Plethysmograph was used in conjunction with a mid-lumbar pressure sensor. Twenty subjects, half of whom were sex offenders, were tested with visual and audio-visual stimuli depicting male and female models at various ages and degrees of sexual development. This was followed by a series of questions regarding sexual preference using a standard polygraph techniques. Other testing included self-report questionnaires and estimates of age and sexual development

It was found that both groups significantly reduced penile tumescence when instructed to suppress to their stated sexual preference in the audio-visual series. A significant reduction was also obtained in suppressing to the category to which they had a maximum response in the same series. When both groups were instructed to fake to a non-preferred stimulus, the levels of arousal generated were quite variable and not significantly different from those obtained before instruction. Extraneous movement as measured by the lumbar pressure device was markedly greater in our 3 incest offenders. The meaning of this finding in unclear. Most of the polygraph data could not be related in any meaningful way to the phallometric results.

B) INTRODUCTION

With the development and increasing use of phallometric techniques in the assessment of sexual preference, there seems to be on the part of some involved a presumption of their infallibility: lips may lie but not the penis. This is, of course, a special case of the more general presumption: lips signal less truth than other organs, or: verbal is less significant than non-verbal behavior. This is an odd reversal of another common presumption: that the specific function of verbal behavior is to signal directly information if not the Truth itself. So what is truth? Or Significance? In a legal arena, once the trial is over, the question is often answered with another presumption, the oracular: that which predicts. Hence, once a pervert, always a pervert, and now with iatric wizardry: once cured, cured forever. The popularity of these beliefs bears heavily on the life of the related publicly-funded programs, so the questions to which they cling deserve some examination. One of these questions is the validity of sex preference measurements with respect to their manipulability.

It is generally agreed among sex clinicians that the best measure of sexual arousal in the male is penile tumescence (Zuckerman, 1971). Penile tumescence, or erectile changes can be measured by volumetric or circumferential devices or even changes in penile length (Earl and Marshall, 1982; Quinsey and Harris, 1976). Recently, bioimpedance analysis has been added to this armamentarium (Bradford, 1986). There have been number of studies of other physiological variables such as respiration, galvanic skin reflex (GSR), pupillary size, EEG, and cardiovascular activity as measures of sexual arousal but none have proved very useful (Bancroft et al, 1971; Steffy and Gauthier, 1970; Quinsey,

1973; Karacan et al, 1974; Kercher and Walker, 1973).

Sex offenders in correctional institutions and mental health facilities frequently appear to be highly motivated to seek some form of treatment for the purpose of eventually securing their release to community life. One might expect these offenders would go to great lengths (if not circumferences, or even volumes) to prove at the earliest opportunity that they are not a risk to public safety.

Quinsey (1983) has produced evidence on the prediction rate of the dangerousness of sex offenders, and it appears that sexual preferences determined by erectile measure are the best basis for making such predictions. However, a problem can arise when the preference appears normal. It has been reported by several behavioral scientists that sex offenders and non-sex offenders can voluntarily alter their sexual arousal pattern.

Freund (1963) using a volumetric measure was one of the first to suggest that penile tumescence could be brought under voluntary control. Abel et al.(1977) have found that some men whose tested sexual preferences are normal rape women and others molest children. Even though penile responses are much better indicators of sexual preference among institutionalized child molesters than are their verbal responses (Quinsey et al.,1975), the fact that some men can influence their penile responses lessens the credibility of sexual preference assessments.

Evidence for the influence of cognitive factors on sexual responding comes

suppression and voluntary production of penile erection. When instructed to inhibit, every subject was able to reduce his erection by at least 50% even when the stimulus was presented as few as 3 and as many as 9 times in succession. When instructed to develop an erection in the absence of a film, every subject was able to enhance arousal, each reaching a peak of about 30% of his maximum. In a follow-up study (Henson and Rubin, 1971) to determine whether the apparent high degree of suppression was a result of inappropriate focus or non-attendance to the stimulus material, the experimenters made sure that the stimulus material was attended to, but the subjects were still able to suppress their penile responses. In a further study (Rubin and Henson, 1975), 6 subjects were instructed to enhance their arousal to an erotic film without employing any physical stimulation. Out of the 6, 4 were able to increase significantly their erections while 2 responded in the opposite manner.

Abel, Barlow, Blanchard and Mavissakalian (1975) reported that a group of subjects with homosexual arousal patterns could also suppress erections. Freund reported in 1961 and 1963 a few instances of successful faking and suppressing of test results by both heterosexual and homosexual subjects.

Laws and Holeman (1978) found that clients were capable of producing responses to stimuli that were not erotic to them and were able to inhibit their penile responding to sexual stimuli that they normally find sexually arousing. This phenomemon has been reported in studies of other sexual arousal patterns as well (Abel, Blanchard and Barlow, 1981; Quinsey and Bergerson, 1976; Quinsey and Carrigan, 1978; Beck, Barlow and Sakheim, 1982). The mechanism by which subjects can suppress erections is presumed to be some form of distraction or shift in attention, but how this is

[illegible] Masters (Heiman and Rubin, 1971). There have been more recent findings which further confirm the deleterious effect of distraction in sexual responding (Viglietta, 1982; Farkas, Sine and Evans, 1979; Abrahamson et al, 1985).

Various stimulus modalities have been employed in phallometric testing. Several studies have compared moving vs. still pictures, on the viewer's penile response. McConaghy (1970,1974) found that movie pictures had a greater impact on his subjects than stills and later supported this in another study of female nudes. Several studies (Abel et al, 1975; Rosen, 1973) have indicated that subjects have difficulty in exerting voluntary control over their penile responses to auditory stimuli. However, Geer and Fuhr (1976) found that auditory stimuli could under certain conditions inhibit penile responses to erotic stimuli.

Our team in clinical and supervisory work with sex offenders were impressed by recidivists, particularly those who had been tested repeatedly using phallometric techniques, with their ability to manipulate and present themselves as normal responders. It was, therefore, felt that a systematic investigation of ability to suppress, fake positive or otherwise distort penile responses in sex preference testing should be undertaken. It was further felt that, although various physiological responses have been studied in conjunction with sex preference testing and some compared with penile responses as noted above, there had been no study comparing polygraph techniques as used in "lie detection" (truth verification) with phallometry.

C) OBJECTIVES:

The present study was designed to demonstrate the following:

1. Patterns of penile response in sex offenders and non-sex offenders to visual and audio-visual stimuli depicting various degrees of sexual development in both male and female models.

2. Ability to suppress the responses obtained in #1.

3. Ability to fake a positive response to non-preferred stimuli.

4. The occurrence of extraneous movement during the above procedures.

5. To study the self-reporting of sexual preference using a standard 4 channel psychophysiological polygraph technique.

6. To collect other relevant data such as estimates of age and sexual development of the models used above and further self-reporting information on sexual and other clinical areas, as well as measures employed in attempting to suppress and fake positive responses.

D) METHOD:

1. Subjects: Two groups of ex-offenders were employed: a) 10 sex offenders (SO) and b) control group of 10 non-sex offenders (CG). While all had been convicted for their offences, and most had been incarcerated for them, none of the subjects were incarcerated at the time of the study.

Of the SO group, 6 (3 pedophiles, 2 rapists and 1 incest) were federal parolees, 2 (1 pedophile and 1 incest) were on probation and the other 2 (1 pedophile and 1 incest) were awaiting sentence. The offence patterns

were pedophilic in 5, incest in 3 and rape in 2. Of the pedophiles. 2 were heterosexual, 2 homosexual and 1 bi-sexual. All incest and rape were heterosexual. The mean age was 40.3 years and the mean educational level was 8.5 years. From the SO group, 7 (4 pedophiles, 2 rapists and 1 incest) had undergone sex preference testing previously. None had had previous in-patient psychiatric treatment.

Of the CG, 3 were federal parolees, 2 on probation and the rest had no supervisory requirements at the time of testing. Most of the offences were alcohol-related in this group. The mean age was 34.1 years and the mean educational level was 11.1. None had had previous sex preference testing and one had been a psychiatric in-patient.

All federal parolees were referred by Correctional Service of Canada and the bulk of the rest were referred by Casual Labour, Canada Employment Centre. Convictions were confirmed through police records and other sources, eg. Childrens Aid Society.

Four subjects were excluded. Three could not complete testing, two due to low intelligence being unable to complete the self-report inventories, the other leaving during the test procedure saying that he had to meet his girlfriend and failed to return. In the fourth case, data were incomplete due to a technical failure to record part of the material (responses to neutral stimuli). One of these four was a sex offender (rapist); he was one of the two who were unable to complete the self-report. The rest were in the control group.

2. Apparatus: The subjects were seated in a comfortable armchair in a cubicle separate from the examiner who could observe him through a one-way mirror and television monitor. The chair was fitted with a desk-like top with foam rubber padding for the arms to rest on. All auditory input was through monoaural headphones. The visual stimuli were presented on a video monitor. Penile circumference was measured by using a mercury-in-rubber strain gauge which the subject placed on the shaft of his penis. The strain gauge was calibrated with plastic cylinders of known circumference before each testing session. The leads of the gauge were connected to a Model 240 Parks Plethysmograph which was, in turn, connected to the appropriate channel of the polygraph instrument. This produced a continuous analogue tracing.

A lumbar pressure sensor consisting of an inflatable rubber bladder (from a blood pressure cuff) was also connected to an appropriate channel of the polygraph instrument. It was placed in the chair under the cover and produced continuous pulse and pressure waves as well as recording most body movements.

A 4 channel polygraph recorder was used: Lafayette Instrument Company's "The Statesman", Model #760-55S. The components used were 1. photoelectric finger plethsymograph which measures blood volume and pulse. 2. a standard bellows apparatus commonly used for measuring respiratory movements which was placed around the abdomen. 3. sphygmomanometer placed on the right arm with the ascultatory sensor over the brachial artery. 4. 2 finger electrodes for recording skin conductance.

3. Procedure: Prior to setting up our testing laboratory, we visited other

centres doing similar work in the province of Ontario: V. Quinsey in Pentanguishine, K. Freund in Toronto, H.Barbaree in Kingston, S. Williams, Sex offender Treatment Program at Kingston Penitentiary and J. Bradford in Ottawa. Most of our stimulus material (visual and audio-visual) was obtained from Dr. Freund. Some of our self-report questionnaires used material gained from these visits.

Subjects arrived by appointment to our laboratory which was located on the third floor of a downtown office building in Hamilton. Many had been re-booked several times due to failures to appear although they had been told in advance they could be earning up to $35.00 for 3 to 4 hours of testing. Several refused to be tested, some ascribing this to the attachment on the penis. As noted above, one subject left before testing was completed and was, therefore, discarded from the study. All subjects used were overtly cooperative. The only complaint was one from the CG who felt humiliated initially by the test proceedings. Money appeared to be the main motivation for participation in this study although some expressed an interest in viewing pornographic films.

On arrival, it was explained to subjects that they would be tested as to their sexual preference. The apparatus was shown and explained to them and they were told that they would be shown pictures of varying degrees of sexual content to which their responses would be recorded. They were informed that they would receive at least $10.00 for this experiment and a possible further $25.00 if they succeeded in making changes as instructed. They were then asked to sign an informed consent form (Appendix A, p.1).

Next, a semi-structured interview was conducted covering education, physical and mental health, criminal history, etc.(Appendix A, p.2)). Sexual Behavior and Pedophilic Inventories were then done (Appendix A, p.3). These questionnaires, as with the subsequent rating scales, were placed in a binder which the subject concealed from the examiner until testing was concluded. Following this, a series of 12 photographic colour still prints of nude male and female models with sexual development ranging from none to full were presented. Subjects were instructed to rate the degree of sexual development according to 3 categories (2 models in each): none, partial and full. They were told if they identified 10 correctly, they would win $5.00 (Appendix A, p.4 of the Sexual Development Perception Test). They were then asked to rate the models as to sexual attractiveness on a scale of 0 to 10 (Appendix A, p.5). They were then asked to choose a sex mate from 1 of 6 prints covering each of the 6 categories (gender x development). Finally, they were asked to pick their sexual preference from the remaining 6 pictures (Appendix A, p.6). The above procedure took approximately a half hour to complete.

At this point, subject was taken to the testing cubicle where he was instructed to lower his pants and underwear below his knees and place the strain gauge on the middle of the shaft of his penis. He was then asked to sit comfortably in the chair and place a towel over his lap. The examiner waited until this was completed, then entered the subject's cubicle and placed the desk board on the chair. The subject was instructed to look carefully at the video screen and to think of the nude pictures that would appear as though he were choosing a sexual partner. He was also told to avoid any unnecessary movement and that any deliberate efforts to distort the test would result in his being disqualified from receiving prize

money.

5 test series were presented to the subject:1 visual (V),2 audio-visual (AV 1 & AV 2), Suppress Arousal Test (SAT), Fake Arousal Test (FAT) and Lie Test (LT).

a. Visual Preference Test: This again presented a series in colour of 12 nude models, male and female, with sexual development ranging from none t full (age ranges: 4-6, 7-10, 11-15, >16) in motion. Each model was shown walking toward the subject with a smile, against a neutral background. Tw models from each category were seen for 15 seconds, each one immediately following the other, for a total of 30 seconds. These pairs were presente in a fixed random sequence. The interval between the presentation of each category was as long as it took to return to baseline (no tumescence). Each series had one neutral (eg. landscape scene). Following this series, an erotic audio-visual scene of explicit heterosexual oral sex lasting from 60 to 90 seconds, was shown with the instruction for the subject to become as fully aroused as possible.

b. Audio-Visual Preference Test: This presents a similar series to V abo with the addition of an audio presentation in a voi e of the same gender as that of the model describing a consenting sexual encounter. An exampl from the Partially Developed Female (PDF) series:

> You ask a pretty 12 year old girl for directions and offer to drive her home. At first, she refuses, then she changes her min As she gets into the car, her skirt rises up and she doesn't bother to adjust it. You playfully go to pull it down and let your hand slide up into her panties. She smiles as you stroke h sparsley covered mound. You drive to a more isolated area where you proceed to remove all of her clothes. She undoes your zippe and begins to stroke your penis. As your excitement builds, she continues with her mouth."

The visual presentation was in still pictures in the following categories: no, partial and full development of both genders; and neutral scene. Duration of each presentation was up to 45 seconds. These presentations were single and not paired as in V. There were two series presented: AV 1 and AV 2. Following this, another erotic audio-visual scene was presented, this one depicting heterosexual intercourse for 60 seconds again with the instruction to get maximally aroused.

c. Suppress Arousal Test:Subjects were directed to read the written instructions for this test and then given the same instructions orally by the examiner. These were to pick their sexual preference from the pictures seen in AV 1 and when this is presented again, to "imagine that this is not your sexual preference and will not get aroused." He was further told that if he was successful in this, he would win $5.00 (Appendix A, p.7).

d. Fake Arousal Test: Subjects again were given written and oral instructions as above; this time to pick one category in AV 2 that they did not like and when presented with this, to "imagine that this person is your sexual preference and will get aroused". Again, success was rewarded with $5.00 (Appendix A, p.8.

This completed the phallometric testing phase of the study. Subjects were instructed to remove the strain gauge and to dress.

e. Lie Test: Here, a Peak of Tension protocol was used (Barland and Raskin, 1975; Lykken, 1960 and Yamoka Suzuki, 1980). Subjects were instructed, again both orally and in writing, to choose one number from 13 to 17 inclusive and write it down, again concealed from the examiner. They were then instructed to review their choice in the FAT above and "write down the person you lied about as being your sexual preference". They were

told that if successful in concealing their choices from the examiner after polygraphic testing, they would win yet another $5.00 (Appendix A, p.9). The attachments described above (see Apparatus) were placed on the subject. After a short period of calibration, the subject was then instructed to answer "no" to the question, "Did you write the number 12?...13?...18?"(12 and 18 were buffer numbers). This test was repeated three times, the second in reverse order and the last in mixed sequence. A similar procedure was used for the second lie test. The subject was again instructed to answer "no" to the question, "Did you lie during the Fake Test that your sexual preference was..." in all categories, ie. male and female: no, partial and fully developed. The buffer here was placed at the beginning of the test and this was the category: "neither male or female". Psychophysiologic (phallometric and polygraphic) testing took approximately 3 hours per subject. Following this, the examiner reviewed the test results with the subject who was questioned as to how he attempted to suppress and fake results.

E) **RESULTS and ANALYSIS:**

To verify comparability of sex offender and control groups, they were first compared on parameters of age, education, number of non-sexual offences, number of alcoholics, non-endorsement of items on the Sexual Behavior Inventory, number of statements endorsed on the Pedophilic Inventory and number of mis-classifications on the Sexual Development Perception Test (SDPT) (See Table 1). The two groups only differed significantly with respect to education (11.1 in CG to 8.5 in SO group; $p < .01$). The only other difference which approaches significance is that between number of nonsexual offences (10 CG to 7 SO) with a p value of .06.

Table 1 MAIN STUDY GROUPS

	CONTROLS	SEX OFFENDERS	
Sample Size	10	10	
Age	34.1 (11.5)	40.3 (10.9)	p = .23
# yrs Education	11.1 (2.0)	8.5 (3.2)	p < .01
# with nonsexual Criminal Offenses	10	7	P = .06
# Alcoholics	7	4	P = .18
Sex Behaviour Inv (# misclassific.)	5.3 (8.5)	2.0 (4.6)	p = .29
# Pedophilic statements endorsed	3.7 (3.7)	3.2 (3.4)	p = .76
Sex.Develop.Percep. Test (# errors)	1.9 (2.2)	1.2 (1.4)	p = .35

Table 2 SEX OFFENDER SUBGROUPS

	PEDOPHILES	INCEST	RAPISTS	
Sample Size	5	3	2	
Age	39.2 (8.7)	49.0 (10.6)	30.0 (9.9)	p = .15
# yrs Education	7.2 (3.7)	8.7 (2.3)	11.5 (0.7)	p > .25
# with nonsexual Criminal Offenses	4	1	2	P = .22
# Alcoholics	1	2	1	P = .46
Sexual Behaviour Inv (# misclassific.)	3.2 (6.6)	1.0 (1.0)	0.5 (0.7)	p = .76
# Pedophilic statements endorsed	4.8 (3.7)	2.3 (3.2)	0.5 (0.7)	p = .32
Sex.Develop.Percept Test (# errors)	1.4 (1.1)	2.3 (1.2)	0.0 (0.0)	p = .24

Since the SO group was composed of different types of offenders, their similiarity on these same variable was checked using one way Analysis of Variance (ANOVA) and the same Fischer test (See Table 2). The differences here were not significant.

A maximum sexual response was obtained on the presentation of explicit erotic audio-visual material in all members of the control group, 9 responding maximally to a scene of heterosexual intercourse and 1 to the oral sex scene. 5 of the SO responded maximally to the other test material (Test 3). Most strikingly different was the pedophilic group where 3 out of 5 responded maximally to underdeveloped categories (2 male and 1 female), leaving only 2 responding maximally to the erotic material. The difference of this group from the CG in this respect was found to be significant at a p of .022 using the Fischer test. It was additionally found that the SO were a much more variable group as to their maximum response than the CG who were, accordingly, more homogeneous. The distribution of these groups were significantly different (Bartlett's Test for homogeniety of variance: $p < .05$). See Figure 1 and Appendix C, p.3) This distribution Chi squared was significantly different at a p of $<.05$. The effect of alcoholism on maximum sexual response was examined. It was found that alcoholics and non-alcoholics in the CG did not differ significantly on this measure. In the SO group, however, there was a significant difference ($P = .01$ by ANOVA) with the alcoholics having a much lower maximum response: a mean of 1.25 (SD 0.52) compared with 5.38 (SD 3.04) for the non-alcoholics (See Fig. 2).

Comparing results obtained from the visual stimuli (V) with those

Figure 1

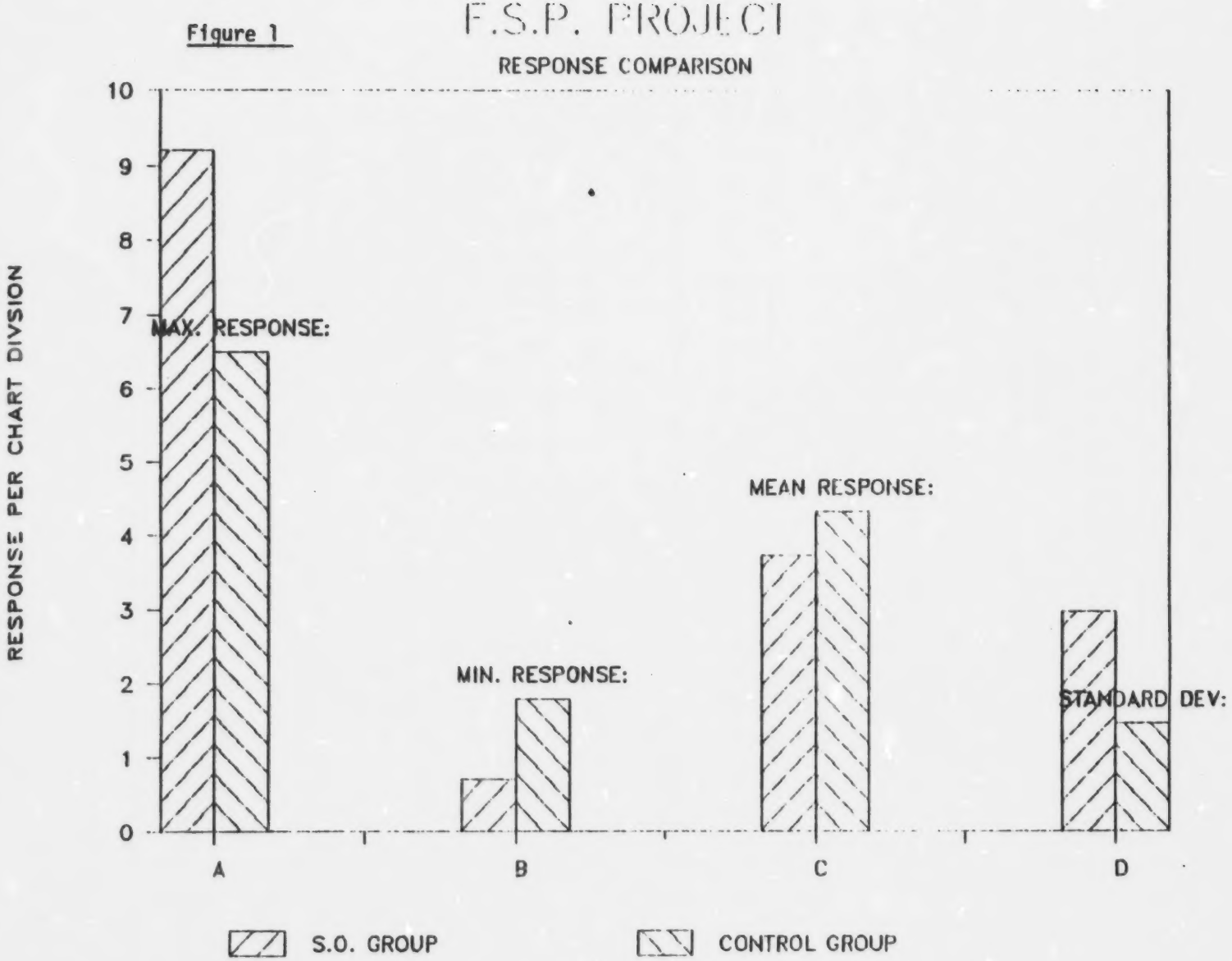
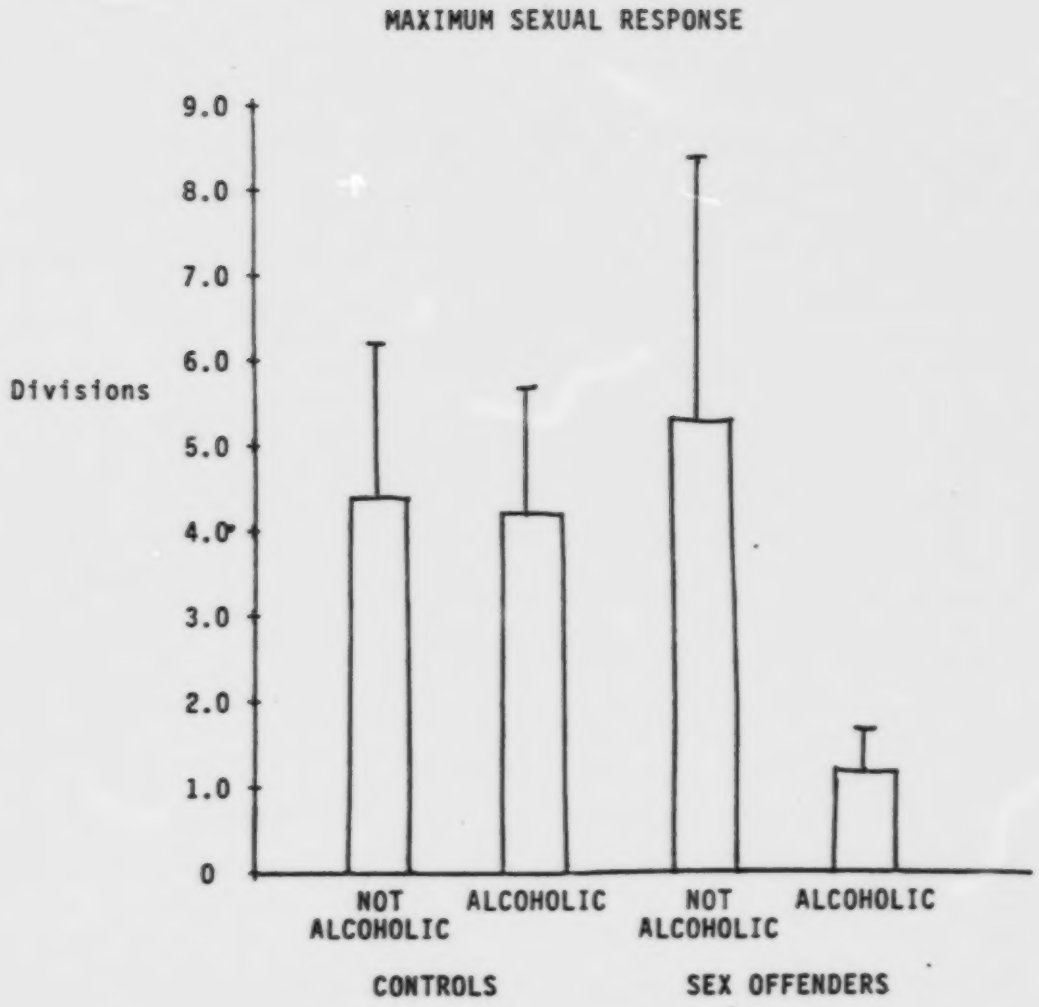

F.S.P. PROJECT
RESPONSE COMPARISON
RESPONSE PER CHART DIVSION
10
9
8
7
6
5
4
3
2
1
0
MAX. RESPONSE:
MIN. RESPONSE:
MEAN RESPONSE:
STANDARD DEV:
A
B
C
D
S.O. GROUP
CONTROL GROUP

Figure 2


MAXIMUM SEXUAL RESPONSE
Divisions
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0
NOT ALCOHOLIC
ALCOHOLIC
NOT ALCOHOLIC
ALCOHOLIC
CONTROLS
SEX OFFENDERS

obtained from audio-visual (AV), we found, as have other investigators, AV material to be more potent in eliciting sexual response. While we found our 2 AV test series correlating quite significantly ($p = .0005$), there was a lower response level in the second series (See Table 4 and Fig. 3).

In the AV series, the pattern of response overall was for both groups to prefer females to a highly significant degree ($p = .001$), and the pubescent group to a less degree ($p = .047$). We broke down the SO group and found that pedophiles prefer females to almost as significant a degree as found overall. The pedophilic group, however, as one might expect, did respond to stimuli in the younger age groups to a significantly greater degree ($p = .02$). See Appendix C, p. 11 and 13.

In testing ability to <u>suppress</u> response, first each subject was to choose a category to which they were maximally attracted and to which they then would attempt to suppress their response. All subjects in both groups chose female categories except one incest offender who chose a neutral category (See Table 5). Overall, both groups demonstrated a significant ability to suppress ($p = .0003$). In Table 6 and Figure 4, there was no significant difference between the groups in their ability to suppress ($p = .95$). In each group, there was one subject for which data were incomplete. In the CG, a subject (DAR, a fraudeur) produced considerable artifact in the AV series, both on the penile and the back tracings, and then a straight line throughout the subsequent penile testing (See Fig. 5 & 6). This led us to suspect that the equipment was malfunctioning or the gauge had become disconnected. We see no way in which the latter possibility could have occurred. In the SO group, a subject (RHH, incest)

Table 3 CATEGORY OF MAXIMUM SEXUAL RESPONSE

	NORMAL	PEDOPH-ILE	INCEST OFFEND	RAPIST	ROW TOTAL
FEMALE - PART DEV		1			1
FEMALE - FULLY DEV				1	1
MALE - UNDEVELOPED		2			2
MALE - PART DEVEL			1		1
HETEROSEXUAL SCENE	9	1	1	1	12
ORAL SEX SCENE	1	1	1		3
COLUMN	10	5	3	2	20

Table 4 AUDIOVISUAL PRESENTATIONS

	MEAN (STD DEV)
Presentation 1	31.63 (30.71)
Presentation 2	23.08 (26.37)
MARGINAL	27.35
COUNT	114

Table 5 CATEGORY CHOSEN TO SUPPRESS

	CONTROL	PEDOPH-ILE	INCEST OFFEND	RAPIST
UNDEVELOPED FEMALE		3		
FULLY DEVELOPED FEMALE	9	2	2	2
	9 *	5	3 *	2

* note - one incest offender chose a neutral condition to suppress suppression testing was invalid for one control

Table 6 NORMAL AND SUPPRESSING RESPONSE TO CHOSEN CONDITION

% Maximum Resp	AVERAGE RESPONSE	SUPPRESSING RESP	N
NORMAL	31.97 (19.49)	7.467 (8.44)	9
SEX OFFENDER	41.58 (28.99)	33.122 (30.45)	9
ENTIRE POPULATION	36.52 (24.24)	20.294 (25.38)	18

Figure 3

SCATTERGRAM OF RESPONSE (% OF MAXIMUM) TO VISUAL AND AUDIOVISUAL CONDITIONS

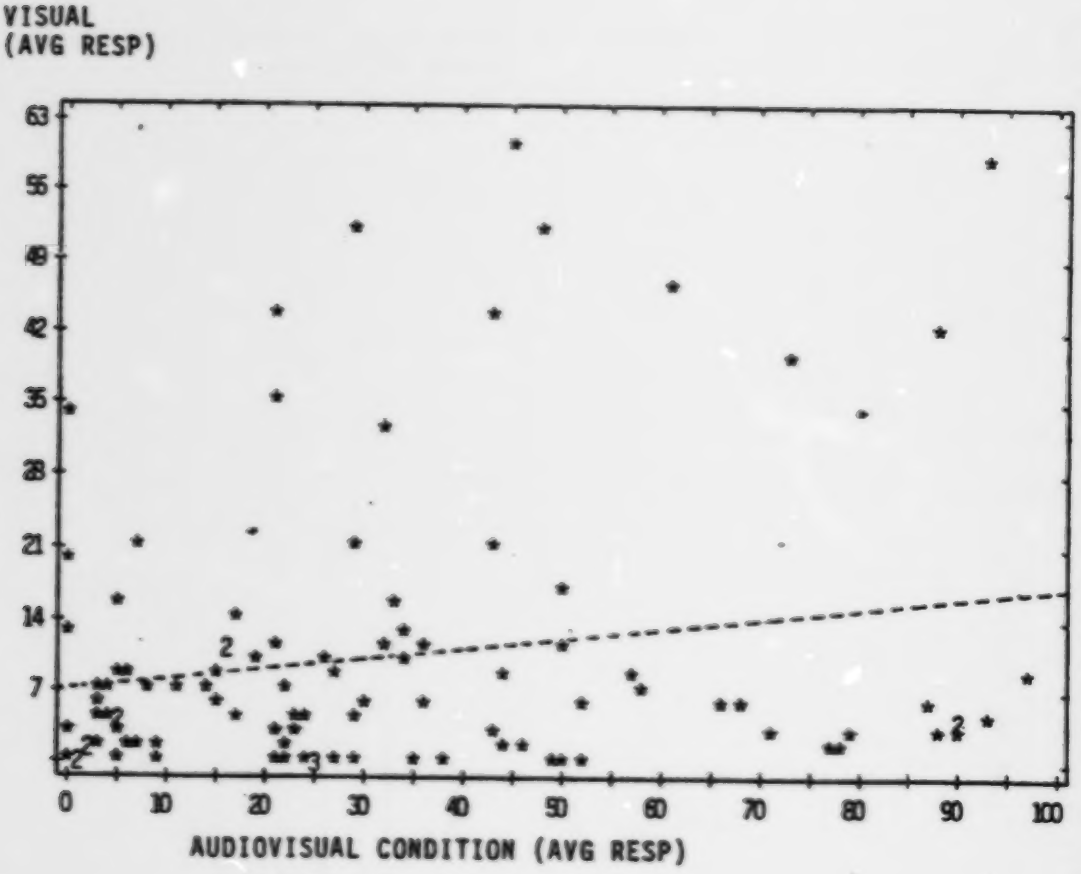


Figure 4

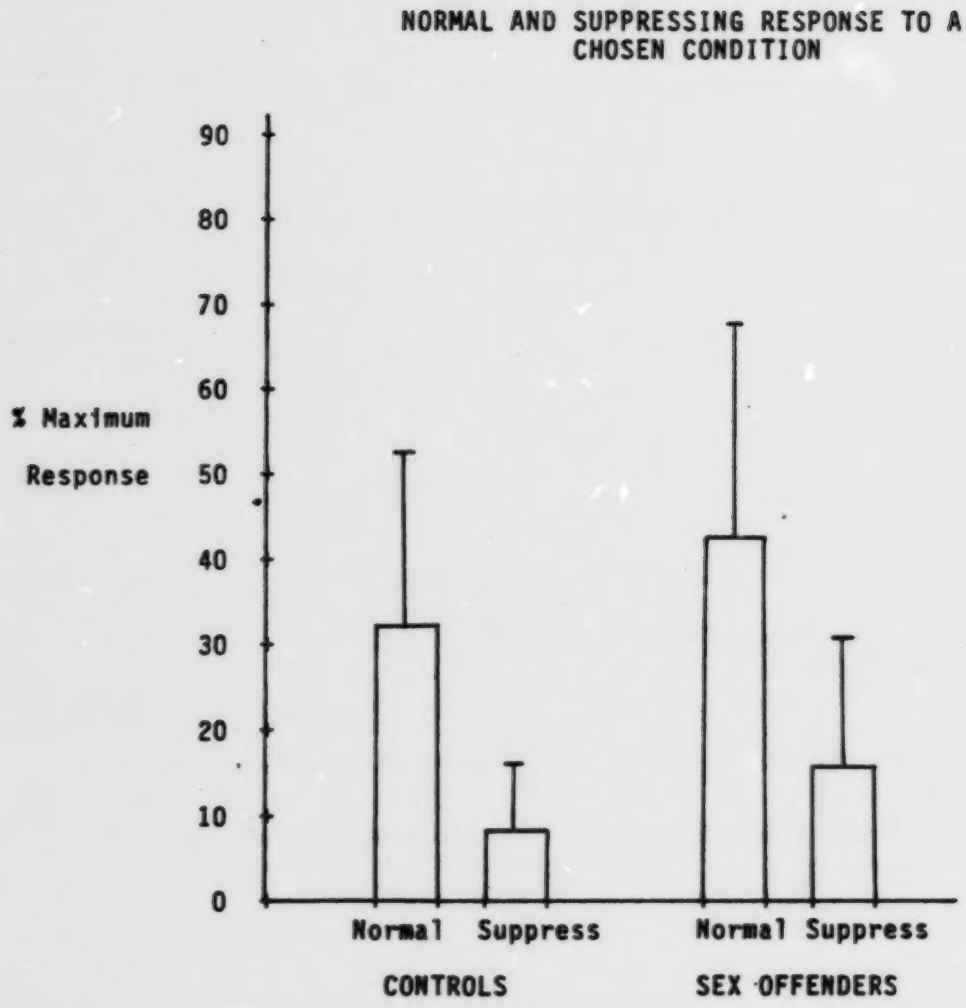

NORMAL AND SUPPRESSING RESPONSE TO A CHOSEN CONDITION
% Maximum Response
90
80
70
60
50
40
30
20
10
0
Normal
Suppress
Normal
Suppress
CONTROLS
SEX OFFENDERS

Figure 5

Subject: DAR

Test: AV 1

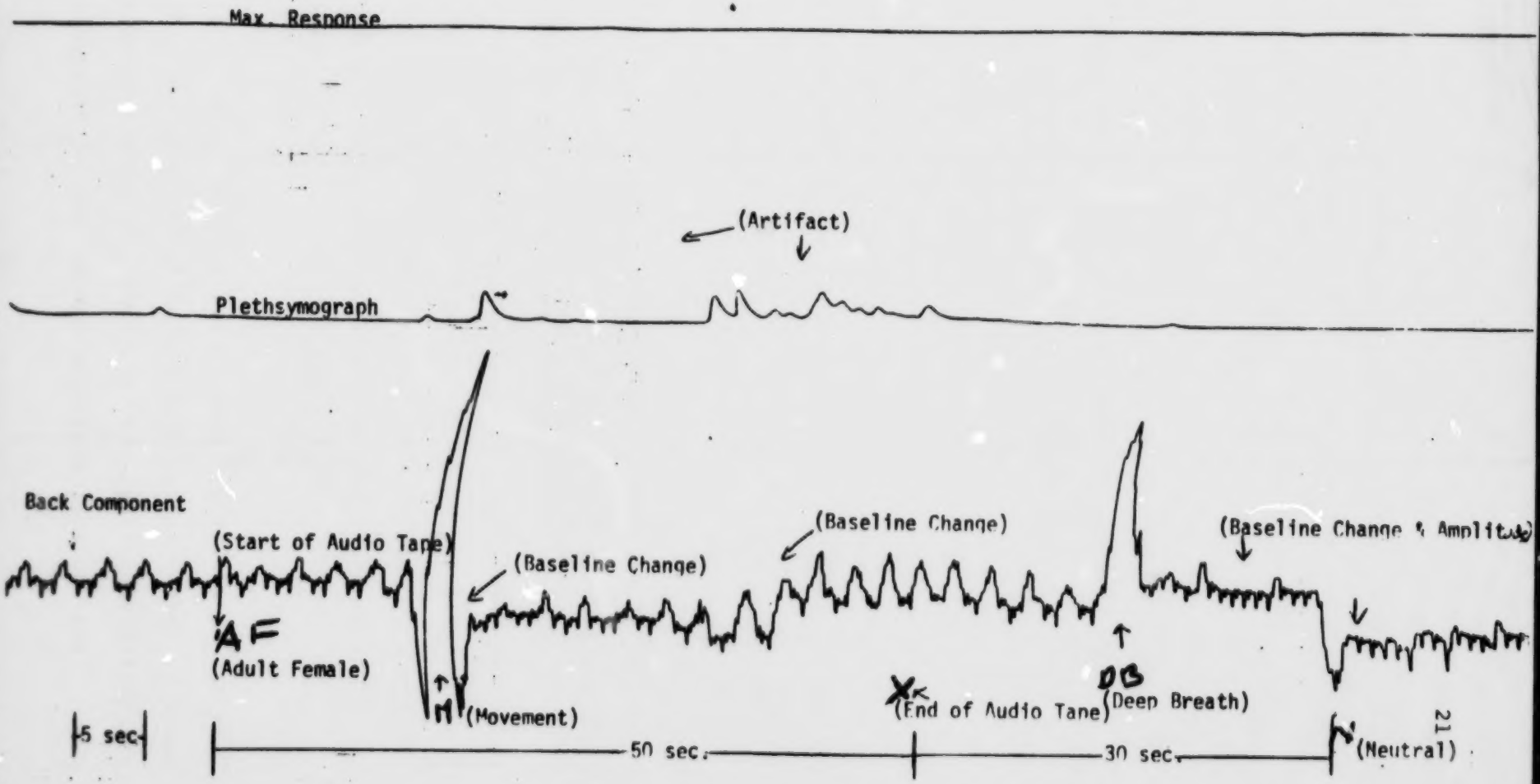
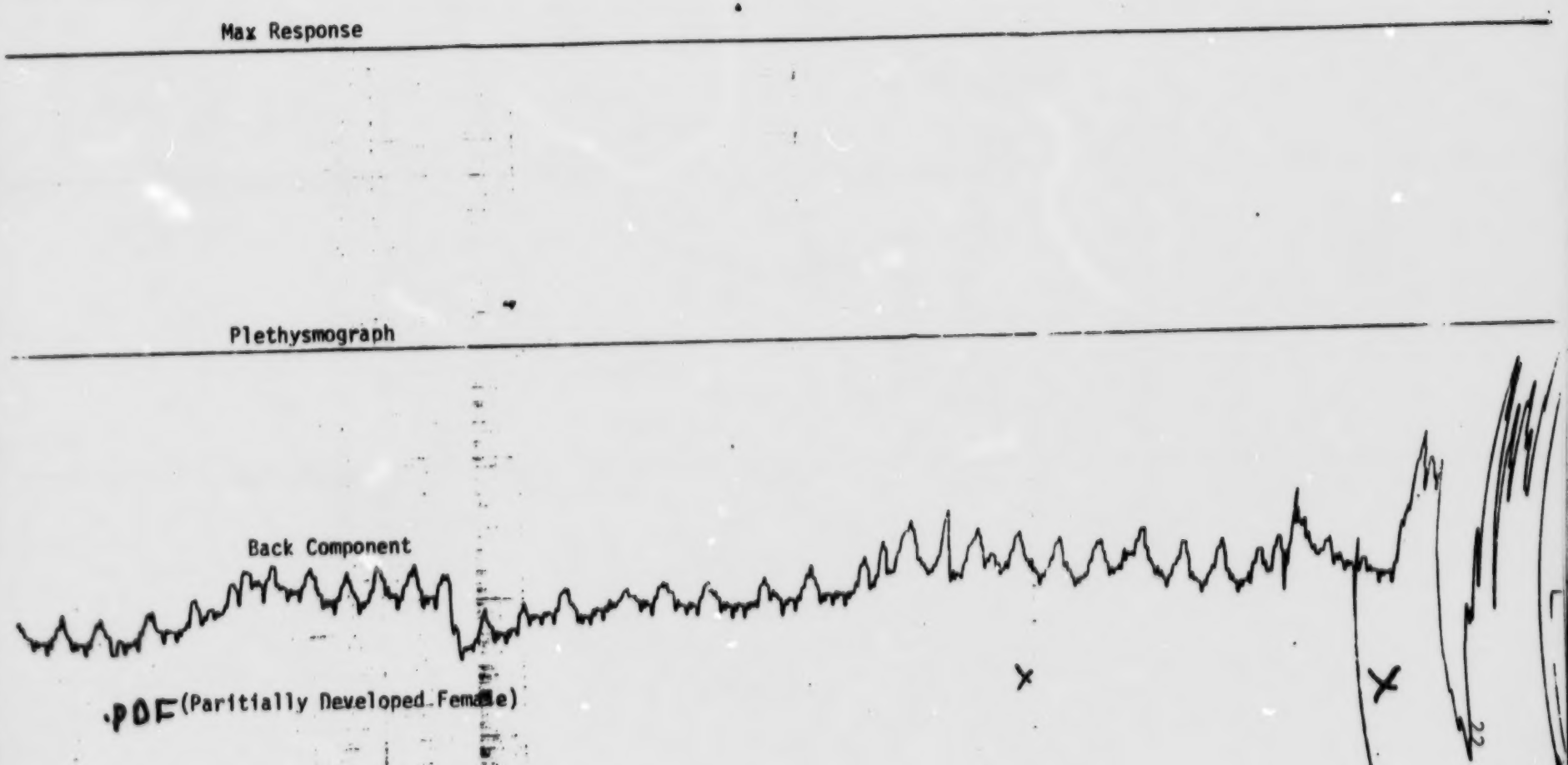


Figure 6

Subject: DAR

Test: Suppress Arousal Test



showed great difficulty comprehending instructions, particularly in the SAT. He did quite poorly on testing of general information and memory, and at the end of testing admitted to being quite confused about the procedures.

In Table 7, we found 6 out of 9 in the CG, and 4 out of 9 in the SO suppressing to less than 50% of their earlier response. Because few subjects (4 (G and 4 SO) chose a category to which they had a maximum response (one of the SO even chose a neutral item as his preference), suppression of their response to the category to which they responded maximally in the AV series was also examined. Here we also found a significant ($p < .0007$) ability to suppress in both groups and again no significant difference between groups (See Table 8 and Fig. 7). In Table 9, we see that in the SO group, 5 out of 10 achieved a greater than 50% reduction while 6 out of 9 in the CG reached that level.

In testing ability to fake positive arousal, each subject was to choose a category to which they were not attracted, and to which they would then attempt to produce an erectile response as if it were their sexual preference. Table 10 shows the categories chosen. Overall, there was no ability to fake sexual respose ($p = .846$), nor was there any significant difference between the groups ($p = .207$) in this measure. In CG, 4 out of 9 and 2 out of 10 were able to produce greater than 50% increase in response to their chosen category (Table 11 and Fig. 8).

A significant difference ($p = .005$) was found among the groups in number of back movements. This was accounted for by a much higher number of these events in the incest group (Table 12). There was no significant difference between SO and CG or between alcoholics and non-alcoholics on this

Table 7 NORMAL AND SUPPRESSING RESPONSE - CHOSEN CATEGORY

Control Group

Subject	Category chosen	AV Resp	Suppres Resp	Diff-erence	% Sup-press
JPH 01	3	33.8	29.0	4.8	14
REM 02	3	57.3	4.9	52.4	11
DAR 03	2	33.3			
JMP 04	3	73.2	4.7	68.5	94
JPS 05	3	29.3	3.4	25.9	88
AJS 06	3	11.1	5.6	5.5	50
FC 07	3	14.5	10.7	3.8	26
RSR 08	3	27.1	2.8	24.3	90
FGS 09	3	22.9	3.8	19.1	83
HWS 10	3	17.2	2.3	14.9	87
N		10	9	9	
Mean		32.0	7.5	24.4	
Std Dev		19.5	8.4	22.4	

Sex Offender Group

Subject	Category chosen	AV Resp	Suppres Resp	Diff-erence	% Sup-press
GED 11	3	30.0	4.7	25.3	84
WGM 12	3	32.9	23.6	9.3	28
JPI 13	1	22.9	19.6	3.3	14
CWA 14	3	92.8	50.0	42.8	46
WGA 15	1	28.6	0.0	28.6	100
AHB 16	3	34.4	25.0	9.4	27
RHH 17	0				
RLB 18	1	76.6	7.6	69.0	90
DRA 19	3	43.4	0.0	43.4	100
WWF 20	3	15.8	21.0	- 5.2	-33
N		9	9	9	
Mean		41.9	16.8	25.1	
Std Dev		25.7	16.0	23.7	

Table 8 NORMAL AND SUPPRESSING RESPONSE - MAXIMUM CONDITION

% Maximum Resp	AVERAGE RESPONSE	SUPPRESSING RESP	N
NORMAL	46.55 (31.58)	22.82 (32.76)	9
SEX OFFENDER	63.07 (26.51)	31.99 (19.69)	10
ENTIRE POPULATION	55.24 (28.76)	27.65 (26.32)	19

Figure 7

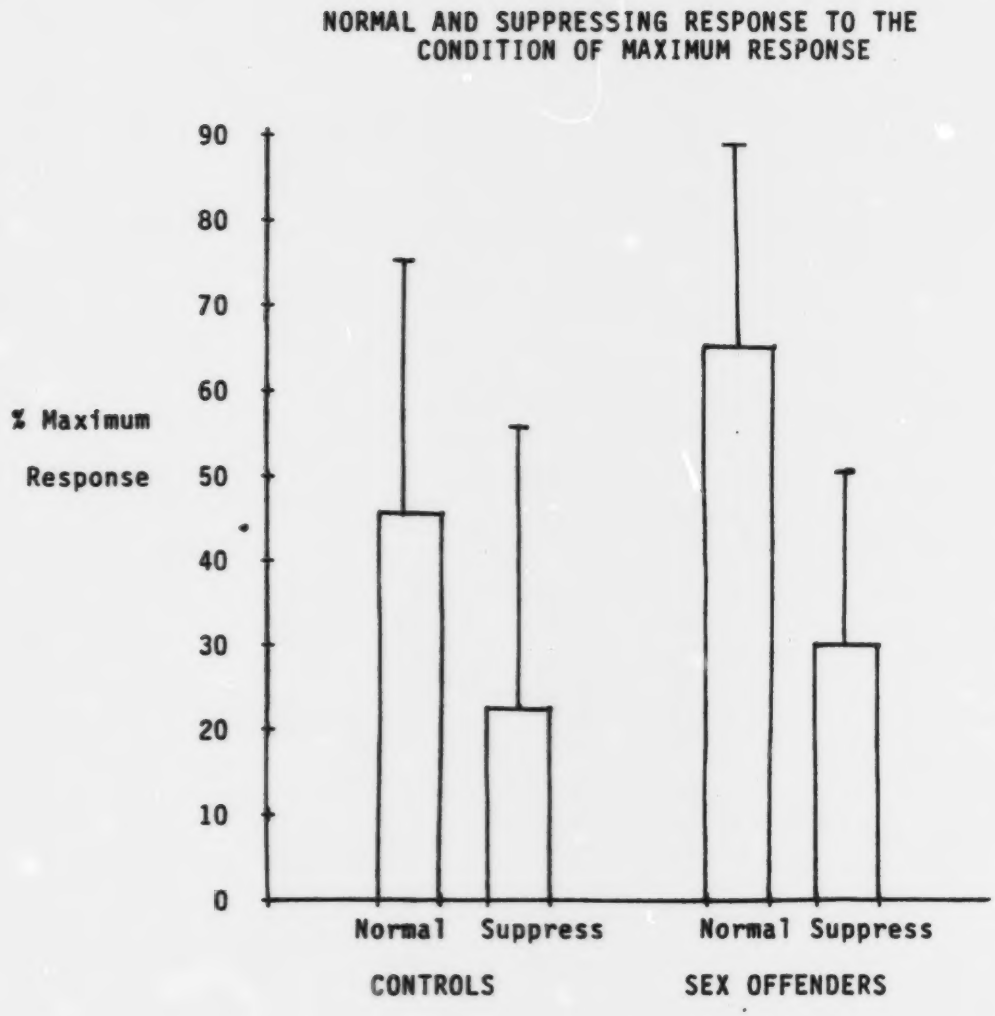

NORMAL AND SUPPRESSING RESPONSE TO THE CONDITION OF MAXIMUM RESPONSE
% Maximum Response
90
80
70
60
50
40
30
20
10
0
Normal
Suppress
Normal
Suppress
CONTROLS
SEX OFFENDERS

Table 9 NORMAL AND SUPPRESSING RESPONSE TO CATEGORY WITH MAXIMUM AVERAGE RESPONSE

Control Group

Subject	Category of Maximum Response	Maximum Response	Suppressing Response	Difference	Pct Suppress
JPH 01	2	96.7	72.5	24.2	25
REM 02	5	77.8	86.8	-9.0	-12
DAR 03	2	33.3			
JMP 04	2	88.3	2.3	86.0	97
JPS 05	3	29.3	3.4	25.9	88
AJS 06	2	25.0	16.6	8.4	34
FC 07	2	21.4	9.5	11.9	56
RSR 08	3	27.1	2.8	24.3	90
FGS 09	2	36.2	9.2	27.0	75
HWS 10	3	17.2	2.3	14.9	87
N		10	9	9	
Mean		45.2	22.8	23.7	
Std Dev		30.1	32.8	26.0	

Sex Offender Group

Subject	Category of Maximum Response	Maximum Response	Suppressing Response	Difference	Pct Suppress
GED 11	3	30.0	4.7	25.3	84
WGM 12	3	32.9	23.6	9.3	28
JPI 13	4	65.9	19.6	46.3	70
CWA 14	3	92.8	50.0	42.8	46
WGA 15	4	61.9	52.3	9.6	16
AHB 16	3	34.4	25.0	9.4	27
RHH 17	2	42.8	71.4	- 28.6	-67
RLB 18	2	92.8	25.0	67.5	73
DRA 19	2	90.4	22.0	68.4	76
WWF 20	2	86.8	26.3	60.5	70
N		10	10	10	
Mean		63.1	32.0	31.1	
Std Dev		26.5	19.7	31.5	

Table 10 CATEGORIES CHOSEN TO FAKE SEXUAL RESPONSE

	CONTROL	PEDOPH-ILE	INCEST OFFEND	RAPIST
FEMALE - UNDEVELOPED	1	1	3	0
FEMALE - PART DEVELOPED	4	2	0	0
FEMALE - FULLY DEVELOPED	0	0	0	2
MALE - UNDEVELOPED	1	1	0	0
MALE - PART DEVELOPED	1	1	0	0
MALE - FULLY DEVELOPED	3	0	0	0
	10	5	3	2

Table 11 FAKING SEXUAL RESPONSE TO A CHOSEN CATEGORY

Control Group

Subject	Categ chosen	Normal Response	Faking Response	Increase	% Increase
JPH 01	2	96.7	72.5	- 24.2	- 25
REM 02	2	50.0	86.8	36.8	74
DAR 03	5	3.1			
JMP 04	6	26.7	81.3	54.6	204
JPS 05	4	3.5	6.9	3.4	97
AJS 06	6	0.0	0.0	0	0
FC 07	6	3.0	10.7	7.7	257
RSR 08	2	13.9	6.9	-7.0	- 50
FGS 09	2	37.2	54.9	17.7	48
HWS 10	1	7.5	0.0	-7.5	-100
N		10	9	9	
Mean		24.2	35.5	9.1	
Std Dev		30.5	37.4	24.2	

Sex Offender Group

Subject	Categ chosen	Normal Response	Faking Response	Increase	% Increase
GED 11	1	4.7	3.3	- 1.4	- 30
WGM 12	1	26.3	7.9	-18.4	- 70
JPI 13	2	52.1	23.5	-28.6	- 55
CWA 14	6	32.1	42.8	10.7	33
WGA 15	5	14.3	33.3	19.0	133
AHB 16	6	21.8	6.3	-15.5	- 71
RHH 17	1	7.1	42.8	35.7	503
RLB 18	2	92.8	84.7	- 8.1	- 9
DRA 19	1	70.6	5.9	-64.7	- 92
WWF 20	4	21.0	21.0	0.0	0
N		10	10	10	
Mean		34.3	27.2	-7.1	
Std Dev		28.8	25.2	27.7	

Figure 8

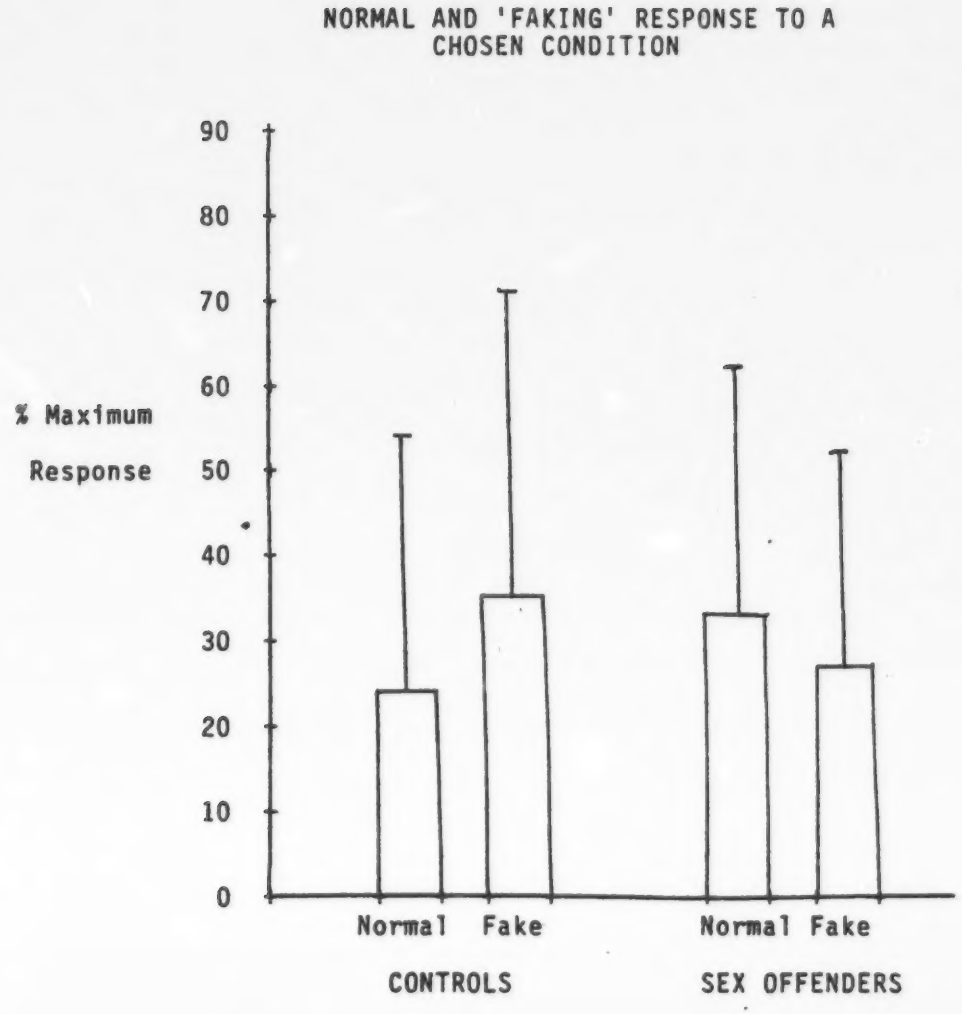

NORMAL AND 'FAKING' RESPONSE TO A CHOSEN CONDITION
% Maximum Response
90
80
70
60
50
40
30
20
10
0
Normal
Fake
Normal
Fake
CONTROLS
SEX OFFENDERS

Table 12 NUMBER OF DISTORTIONS (BACK MOVEMENTS)

	Mean	(Std dev)	N
CONTROLS	5.70	(5.52)	10
PEDOPHILES	7.00	(3.94)	5
INCEST OFFENDERS	20.67	(7.64)	3
RAPISTS	5.50	(0.71)	2

measure.

In the polygraphic phase, the first test was to lie about a chosen number. 6 out of 10 of the SO and 4 of the 10 CG were able to conceal their choices from the examiner. Thus, both groups appeared to be more successfully deceptive than the usual clientele seen by this examiner. (This latter client population, consisting mainly of legal referrals in criminal and civil matters, produced in 1985/86, a 20% rate of successful deceptions.) In the second part, lying about faking, there were no useful polygraphic patterns that emerged which would allow us to compare individuals or groups.

On final interview after removal of testing attachments and subjects had been told how much they won, the following information was elicited: All of the CG denied any problems understanding the procedures or accomplishing suppression. 6 admitted problems in their efforts to generate arousal with the FAT. Methods used by CG to fake and suppress included imagination (eg. ex-wife, partially developed as fully developed female), muscle control and techniques learned by bio-feedback.

Of the sex offenders, 5 (3 pedophiles, 1 rapist and 1 incest) said that they were confused and misinterpreted the instructions on the SAT and 3 had similar complaints about the FAT. The 3 pedophiles identified above as having difficulty with the SAT, all chose undeveloped female as their sexual preference. This was not consistent with our file information which revealed that the 3 pedophiles had sexual offences against undeveloped and pubescent males. The methods used to suppress included counting backwards, thinking of hockey and baseball scores, meditation (eg. one hand clapping)

and imagining suppressing an orgasm during coitus. The only technique mentioned to fake arousal was to think of a girlfriend.

F) DISCUSSION and CONCLUSIONS:

A clear ability to suppress penile responses to preferred stimuli, both as determined by the subject's choice and by measurement of tumescence, is demonstrated in both sex offender and other (non-sex) offender groups.

No clear ability to "fake" penile arousal to a non-preferred stimulus was demonstrated. This may be in part due to the heterogeneous mixture in the sex offender group. We found this group to be significantly more variable in their maximum sexual response, particularly between alcoholics and non-alcoholics (Appendix C, pg. 4). Looking at the averages (Appendix C, p. 18), the incest offenders shared with the control group a trend toward being able to fake arousal, while the pedophilic and rapist majority (7 out of 10) of sex offenders showed a trend in the opposite direction. However, when reviewing individual responses to fake arousal, there were 4 CG and 2 SO (1 pedophile and 1 incest) able to increase their penile responses over 50% in accord with the instructions. Of some importance here appears to be the categories chosen as non-preferred and to which preference was to be faked. The control group, totally heterosexual, picked all categories but "fully developed female". 2 of the 3 incest offenders responded maximally to "partially developed female" and one to "fully developed female", but all picked "undeveloped female" as the category to which to fake. These 2 groups showed fairly good compliance with the instructions, in marked contrast to the pedophiles and rapists. The pedophilic group chose neither "fully developed female" nor "fully

developed male"; they claimed to fake an arousal to undeveloped or at most partially developed models. The pedophiles, then, were telling us they were pretending to be pedophiles! Similarly, the rapists who have already showed maximum response to "fully developed female" again picked this same category as that to which they would "fake" arousal. We have no explanation for the paradoxical lowering of response in these 2 groups in the Fake Arousal Test.

One attempt at finding an indicator for manipulation and other artifacts was the introduction of a back pressure sensor. Only the incest offenders showed a significantly greater amount of back movement. Again, we have no good explanation for this finding. The numbers of incest offenders (3) are too small to allow for much interpretation other than to say that they do, because of the much greater number of events in this category, reach statistical significance.

As noted above, the polygraph data were very difficult, if not impossible, to analyze in such a way as to compare with our other findings. The simplest test here was to pick a number and try to fool the examiner. This is commonly used in polygraph testing as an indicator of the subject's responsiveness. We found that our control group was somewhat more responsive than the sex offender group, but 4 controls fooled the examiner as compared with 6 of the sex offenders. Neither group, however, was as responsive as the usual clientele of the lab. Fatigue may have had a bearing as this test was administered at the end of nearly 3 hours of testing.

We have already found from the phallometric testing vis-a-vis self report, that more faking has occurred than was instructed, especially in the sex offender (except incest) group. So now we are asking our subjects to lie about faking something they have already lied about or faked! This must be at least as difficult to do as it is to think about, even to a fairly skilled liar or faker. Small wonder that many of our subjects, especially sex offenders, reported being confused.

Of some concern in this study was the high level of response to "partiall developed female". This category drew the highest responses in both groups, and there was no other indication that we were dealing mainly wit hebephiles (preference for pubescents). The narration in these presentations was by a different woman who also did the neutral scene to which one subject reported he was most attracted.

Another question concerns the apparetly lower response level in the secon audio-visual series. Is this real? If so, is it habituation, "practice effect", fatigue, satiation, or what? More re-runs would help settle the first question (See Appendix C, page 7).

This study was undertaken with the feeling that some form of concealment of sexual preference was being practiced by sex offenders in the correctional system. Our data indicate not only an ability to suppress when instructed to do so, but a proclivity to do so even prior to such instructions. This finding, then, should hardly come as a surprise to us. An unexpected finding, though, was the differential effect of alcoholism on the sex offender group as compared to the control group in terms of maximum arousal. Lower levels of arousal are to be expected among

alcoholics generally, but this was not significant in the control group.

G) IMPLICATIONS FOR FUTURE RESEARCH

While we are satisfied that we have demonstrated a clear ability to suppress sexual response on the part of both sex offenders and controls, our results which form the basis of this conclusion are not completely unassailable. Had we known the outset what we know now, our design would have been somewhat different, eg:

1. 4 to 5 audio-visual runs with 1 or 2 following the suppress and fake runs to establish any effect of repetition.

2. no visual run.

3. a more uniform sex offender group: all pedophiles with this protocol.

4. the same narrator, at least for all stimulus material of the same sex.

5. alternate the order of the fake and suppress test.

6. a simpler question for the polygraph test, eg. "Do you prefer sex with this one?" This should be in conjunction with the simultaneous presentation of the appropriate audio-visual material.

The question remains, is it worth repeating? Decisions affecting the health, welfare and liberty of many people are being made continuously in our legal-penile system. They need to be as well-informed as possible. Where tests are used - always only as one item of information of a variety of types and from a variety of sources - the limits of that particular technology must be well known. In a relatively new field like this one

(phallometry), there is a particular need to increase our knowlege so as to give appropriate weight to its results. It is, therefore, not difficul to justify a better study in this area. Its justification, however, must be weighed against other priorities.

Some other studies are suggested:

a) Sexual Development Perception Test. We found sex offenders as well as controls rating models as older and more sexually developed than expected This very portable collection of photographic prints could be standardi-- and validated fairly easily, then compared with other data. e.g. clinical criminologic, phallometric, self-report; and these developed into a quite useful tool.

b) Incest. Other studies find this group of offenders relatively normal. We found our few (3) to be significantly fidgety with our back pressure sensor. It would be interesting to test a larger group to see this holds, and at the same time, see how they do on the S.D.P.T. above.

c) Sexual Phobias. Part of the heterogeneity of our sex offender group no examined was the area of specific phobias, eg. to hair or breast. Certain aversions like these were mentioned by a few of our subjects and could account for a kind of pseudo-pedophilia. This could be a much more treatable group (eg. by specific desensitization) than the true pedophiles. When we are able to study a larger series of "pedophiles", we would like to look particularly for such a sub-group.

d) Rape: a more important area to study because of the harm inflicted, especially now that our treatment armamentarium has been improved, particularly with anti-androgens. Diagnostic discrimination within this group remains poor but may improve with its likely addition to DSM III R. We still need a good study comparing (and better, contrasting)

anti-androgen responders from non-responders. We await with great interest therefore, John Bradford's results in this area.

e) Psychopathy research has produced some physiological findings of great theoretical interest which cry for practical adaptation. We have not yet seen any attempt to relate this to paraphilic sexology. It is conceivable that such a marriage could identify a true sexual psychopath.

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APPENDIX " A "

Informed Consent Form	Pg. 1
Interview	2
Inventories	3a, 3b
Sexual Development Perception Test	4
Sexual Attractiveness Test	5
Sexual Preference Test: Group A & B	6a, 6b
Suppress Arousal Test	7
Fake Arousal Test	8
Lie Test	9

Ontario Ministry of Health
Hamilton Psychiatric Hospital
P.O. Box 585
Hamilton, Ontario
L8N 3K7
416/388-2511

CONSENT TO PARTICIPATE IN RESEARCH STUDY

"Faking Sexual Preference"

I, _____ agree to participate in a study to determine my sexual preference. I understand that this will involve attachments for recording electrical activity on my hand, arm, penis and chest. Pictures with varying degrees of sexual content will be shown and my responses to these recorded.

I understand that all information arising out of this study or subsequent publications shall be treated in a confidential manner and will not disclose my identity.

I understand that there is no treatment or other intervention involved and hence no risk attached. I further expect to receive $10.00 for participation in this study and a possible further $25.00 if I succeed in making changes as instructed in the experiment.

This agreement is made with no inducements other than stated above, threats or coercion, and knowing that I can leave anytime I so desire.

Witness _____ Subject _____

Time _____ Date _____

S.P.T.

Time: | Date

Name of Patient: | Age: | D.O.B. | Birthplace

Name/Aliases/Change of Name:

Address: | How Long:

Telephone: | Yrs. | Mos.

Height	Weight	Is this your normal weight? (Any weight change)	Hair	Eyes	Complex.	Build	Tatoo other

Education Completed: | Other Certificates/Licences:

Public Highschool/ College/ University

Scholastic Abilities:
1. Concentration/Cognition: Subtract 7's from 100
2. Memory: repeat 6 digits forwards and backwards: 629158
3. Orientation: Date/ Mayor/ Season/ Prime Minister/ President/ My Name/ Distance to Toronto

Physical Condition Now:
1. Good
2. Fair-why
3. Poor-why

Health During Childhood: Good-Fair Poor
Health During Adolescence: Good-Fair-Poor
Health During Adult: Good-Fair-Poor

Problems Sleeping:

No. of Hours Required

When you sleep, do you have good or bad dreams: Explain
Nightmares:

Ever been a Patient of Mental Hosp:

When:

Ever Seen a Psychologist or Psychiatrist

When:

Any Pills/Meds Last 24 hrs.

What? Last T

Fainting Spells	Seizures	Worst Time of your life:

Ever wish you were dead:

Have you ever thought of killing yourself:

Heart	High/Low Blood Pressure:	Allergies	Kidney

Back Injuries:	Veneral Disease:	Thyroid:	Epilepsy/Convulsions:

Hearing/Eyes (D.U. wear glasses)	Head/EEG	Chest:	Stomach:	Shortness of Br

Ever been knocked unconcious	Alcohol Drink 24 hrs. What:	How often d.u. drink enough that you don't remember:
Do I drink: heavy, moderate, social Explain how much:	Marijuana: Last 24hrs. Last Time:	How old the first time: Drug Habit
LSD: Times: Good Trips: Bad Trips: No Trips:	Any other drugs: Glue/Gass Hash/Coke/Stp	

1. Have you ever had something like a dream when you thought you were awake?
2. Have you ever had a vision or seen an apparition?
3. Have you ever thought you heard people talk when no one was around?

Do your ever find strange things come into your mind?
You don't know where they come from? ie. see or hear things

Marital Status: If married, how long: Relationship: Good/Fair/Poor	Children: Previous Marriage:	Impression of Home Atmosphere:
Military: Years: Army: Navy: Airforce:	Type of Discharge: Most Time in Brig:	
Arrested as an Adult: (What's the most time you've done?) (Fed. time?)	For What: (Criminal Record or Convictions)	
Juvenile Record	Probation/Parole	Any Trouble with Police/Occurrence:
Current Employment: How long employed:	Unemployed: How long:	Longest Job:
Child: Sunday School Catechism Temple	Religion: Go Now:	Believe in God:

Basic Honesty:
Grade 1 to 10:

Have you ever had a sex preference test? Time Completed:

Where? When?

SEXUAL BEHAVIOUR INVENTORY---Male.

On the following page you will find a series of statements which describe various sexual behaviours which a male may have engaged in. Read each statement and decide whether or not you have experienced the sexual behaviour described. Then indicate your answer.

If you have engaged in the sexual behaviour described in a statement at any time since your 12th birthday, circle YES. If you have never engaged in the behaviour since then, circle NO. Most items refer to your behaviour with other individuals; you should consider these items as referring to any individuals who were also over 12 years old.

This inventory has been devised for young and sexually inexperienced persons as well as for married and sexually experienced persons. In addition, there are great differences between people in sexual behaviour preference. Thus, you will find sexual behaviours described which you have not engaged in. Please note you are asked to indicate only whether or not you have taken part in the sexual behaviour--you are <u>not</u> asked for your attitude or feelings.

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HETEROSEXUAL BEHAVIOUR

YES NO 1. I have kissed the lips of a female for one minute continuously.

YES NO 2. I have engaged in sexual intercourse with a female.

YES NO 3. I have manipulted the genitals of a female with my tongue.

YES NO 4. I have manipulated the breasts of a female with my hands underneath her clothes.

YES NO 5. I have manipulted the genitals of a female with my hands over her clothes.

YES NO 6. A female has manipulted my genitals with her tongue.

YES NO 7. I have engaged in mutual hand-manipulation of genitals with a female.

YES NO 8. I have kissed the nipples of the breasts of a female.

YES NO 9. I have engaged in mutual mouth-genital manipulations with a female to the point of her orgasm and my ejaculation.

YES NO 10. I have manipulated the genitals of a female with my hands underneath her clothes.

YES NO 11. A female has manipulated my genitals with her mouth to the point of my ejaculation.

YES NO 12. A female has manipulated my genitals with her hands over my clothes.

YES NO 13. I have engaged in heterosexual intercourse using rear entry to the vagina.

YES NO 14. I have touched the genitals of a female with my lips.

YES NO 15. A female has touched my genitals with her lips.

YES NO 16. I have engaged in mutual-mouth genital manipulations with a female.

YES NO 17. I have manipulated the genitals of a female with my hands to the point of massive secretions from her genitals.

YES NO 18. A female has manipulated my genitals with her hands to the point of ejaculation.

YES NO 19. A female has manipulated my genitals with her hands under my clothes.

YES NO 20. I have engaged in mutual-hand manipulation of genitals with a female to the point of her orgasm and my ejaculation.

YES NO 21. I have manipulated the breasts of a female with my hands over her clothes.

H. Barbaree & Wm. Marshall (unvalidated)

SwCh

Name_____ Date___/___/___

Please read carefully then answer each of the following statements by marking on the scale (1 to 6) the point which best describes the way you usually feel. There are no right or wrong answers, onl opinions. Use the following code to help you.

1 strongly agree
2 moderaely agree
3 mildly agree
4 mildly disagree
5 moderately disagree
6 strongly disagree

1.	If a child willingly goes into the home of a man he/she does not know well then the man can hardly be blamed for thinking he/she wants to have sex play.	1 2 3 4 5 6
2.	Children quite enjoy sex with men if the man is nice to them.	1 2 3 4 5 6
3.	Most children actually enjoy sex with an adult so long as the man does not hurt them.	1 2 3 4 5 6
4.	Many children are sexually seductive towards adults.	1 2 3 4 5 6
5.	Parents who let their children play at playgrounds without adult supervision should expect their children to become involved in sex with an adult.	1 2 3 4 5 6
6.	Children who are sexually abused by adults are almost always unloved by their parents.	1 2 3 4 5 6
7.	Children enjoy sexual attention from adults.	1 2 3 4 5 6
8.	Men who have sex with children are usually led into it by the child.	1 2 3 4 5 6
9.	Children can easily resist the sexual advances of an adult.	1 2 3 4 5 6
10.	If a child willingly sits on the knee of an adult male then it is his/her fault if the man touches him/her sexually.	1 2 3 4 5 6
11.	An adult should be allowed to force a child to have sex.	1 2 3 4 5 6

1 strongly agree
2 moderaely agree
3 mildly agree
4 mildly disagree
5 moderately disagree
6 strongly disagree

12.	Children often falsely report being sexually abused in order to get back at an adult.	1	2	3	4	5	6
13.	Children who do not wear underpants, or who sit in a way that is revealing should expect to be sexually assaulted.	1	2	3	4	5	6
14.	Children who are unloved are actually helped by men who have sex with them.	1	2	3	4	5	6
15.	Sex between children and adults is quite natural and it is only because of the Victorian rules of our society that men are punished for doing this.	1	2	3	4	5	6
16.	It is far better for young people to have their first sexual experience during childhood with an adult, than to risk what is sure to be an unpleasant sexual experience with someone their own age when they are a teenager.	1	2	3	4	5	6
17.	When an adult is found to have had sex with a child, it is rarely the first time for the child; he/she has usually had sex with others before being discovered.	1	2	3	4	5	6
18.	If children wander the streets they are fair game for adults who want to have sex with them.	1	2	3	4	5	6
19.	Although children are usually cooperative partners in sex with adults, they often report the man because they are afraid they will get into trouble.	1	2	3	4	5	6

20. If a child reported being sexually abused by an adult male, would you report him/her if the accused were:

- a good friend of yours?	Yes	No
- an unemployed man?	Yes	No
- a man with a record of petty thefts?	Yes	No
- a professional (eg. lawyer, doctor, etc.)?	Yes	No
- a tradesman (eg. plumber, builder, etc.)?	Yes	No
- an Indian?	Yes	No
- the child's father?	Yes	No

f.S.P. Project

Subject No.	

INSTRUCTIONS

PLEASE VIEW EACH PICTURE CAREFULLY AND RATE THE AMOUNT OF SEXUAL DEVELOPMENT OF THE PERSON WHOSE NAME IS AFFIXED TO THE PAGE.

THE THREE GROUPINGS ARE THE FOLLOWING:
a) No sexual development
b) Partial sexual development
c) Full sexual development

IF YOU CANNOT DECIDE, INSERT A QUESTION REPLY (?). IF YOU CAN IDENTIFY TEN CORRECTLY, YOU WILL WIN A CASH PRIZE OF $5.00.

No.	NAME	SEXUAL DEVELOPMENT
1	FRANK	
2	TINA	
3	JIM	
4	MARY	
5	JOHN	
6	URSULA	
7	PAUL	
8	LAURA	
9	JESSICA	
10	DAVID	
11	JENNIFER	
12	BOB	

SEXUAL ATTRACTIVENESS TEST

INSTRUCTIONS

AFTER YOU HAVE RATED THE AMOUNT OF SEXUAL DEVELOPMENT OF THE PERSONS IN EACH PICTURE, MARK ON A SCALE FROM ZERO TO TEN (0-10, where 10 is high and 0 is low), HOW SEXUALLY ATTRACTIVE THESE PERSONS WOULD BE TO YOU.

No.	NAME	SEXUAL ATTRACTIVENESS
1	FRANK	
2	TINA	
3	JIM	
4	MARY	
5	JOHN	
6	URSULA	
7	PAUL	
8	LAURA	
9	JESSICA	
10	DAVID	
11	JENNIFER	
12	BOB	

SEXUAL PREFERENCE TEST : Group A

F.S.P. Project

Subject No.	

INSTRUCTIONS

AFTER VIEWING EACH PICTURE CAREFULLY, CHOOSE ONLY ONE PERSON AS YOUR SEX MATE. MARK AN "X" NEXT TO THE NAME, IN THE COLUMN LABELED "SEXUAL PREFERENCE".

GROUP "A"		
No.	NAME	SEXUAL PREFERENCE
1	FRANK	
2	TINA	
3	JIM	
4	MARY	
5	JOHN	
6	URSULA	

There will be a cash prize of $5.00 if you carry out the instructions succesfully, and manage to deceive the examiner.

SEXUAL PREFERENCE TEST : Group B

F.S.P. Project

Subject No.	

INSTRUCTIONS

AFTER VIEWING EACH PICTURE CAREFULLY, CHOOSE ONLY ONE PERSON AS YOU

SEX MATE. MARK AN "X" NEXT TO THE NAME, IN THE COLUMN LABELED "SEXU
PREFERENCE".

GROUP "B"		
No.	NAME	SEXUAL PREFERENCE
7	PAUL	
8	LAURA	
9	JESSICA	
10	DAVID	
11	JENNIFER	
12	BOB	

There will be a cash prize of $3.00 if you carry out the instructions succesfully, and manage to deceive the examiner.

'.S.P. PROJECT SUBJECT No:

SUPPRESS AROUSAL TEST

Place an "X" beside ONE of the seven groups listed below that you liked the best, from watching the tapes on the TV, and would consider to be your sexual preference.

INSTRUCTIONS

Your instructions during this test, are that when you watch the person on the TV that you liked the best, you will imagine that this is NOT your sexual preference and you will not get aroused (in other words, you will keep your responses DOWN to your sexual preference).

There will be a cash prize of $5.00, if you carry out the instructions successfully.

NO.	AMOUNT OF SEXUAL DEVELOPMENT	SEXUAL PREFERENCE
1	No sexual development female	
2	Partial sexual development female	
3	Full sexual development female	
4	No sexual development male	
5	Partial sexual development male	
6	Full sexual development male	
7	Neutral (Neither male nor female)	

F.S.P. PROJECT SUBJECT No:

FAKE AROUSAL TEST

Place an "X" beside ONE of the six groups listed below, to show who you DID NOT LIKE while watching them on video tape on TV and would NOT consider to be your sexual preference.

INSTRUCTIONS

Your instructions during this test, are that when you watch the person on the TV that you DID NOT LIKE (In other words the one that you marked with an "X"), you will imagine that this person IS your sexual preference and you will try to become aroused.

There will be a cash prize of $5.00, if you carry out the instructions successfully.

NO.	AMOUNT OF SEXUAL DEVELOPMENT	SEXUAL PREFERENCE
1	No sexual development female	
2	Partial sexual development female	
3	Full sexual development female	
4	No sexual development male	
5	Partial sexual development male	
6	Full sexual development male	

F.S.P. PROJECT SUBJECT No:

LIE TEST

1. You will be asked to choose ONE of the following numbers:

13, 14, 15, 16, 17,

INSTRUCTIONS

You will write the number in this space _____ . You WILL NOT reveal your number to the examiner. You will be instructed to answer NO when asked, "did you write the number 13... 14... 15... 16... 17 ?"

. You will review the FAKE AROUSAL TEST, and write down the person that you lied about as being your sexual preference (the one you marked with an "X") in this space._____

INSTRUCTIONS

You will be instructed to answer NO when asked the question, "did you lie during the FAKE AROUSAL TEST, that your sexual preference was .....?"

Please circle (in the list below) the one that you wrote down.

1. No sexual development female
2. Partial sexual development female
3. Full sexual development female
4. No sexual development male
5. Partial sexual development male
6. Full sexual development male

There will be a $5.00 cash reward if you succeed in fooling or concealing your answer from the examiner.

APPENDIX " B "

(Raw Data)

KEY TO SEXUAL DEVELOPMENT CATEGORIES:

A- No sexual development female
B- Partial sexual development female
C- Full sexual development female
D- No sexual development male
E- Partial sexual development male
F- Full sexual development male

			% PENILE RESPONSE					
GROUP	SUBJECT	TEST	A	B	C	D	E	F
CONT.	J.P.H.	VT1&2	3.2	8.1	9.6	6.5	1.6	3.2
CONT.	J.P.H.	AV1	90.3	96.7	33.8	58.0	43.5	79.0
CONT.	J.P.H.	AV2	0.0	0.0	0.0	0.0	0.0	0.0
CONT.	J.P.H.	FAT	58.0	72.5	29.0	72.5	72.5	59.6
CONT.	J.P.H.	SAT	58.0	72.5	29.0	72.5	72.5	59.6
CONT.	R.E.M.	VT1&2	0.8	16.3	9.0	0.0	1.6	51.6
CONT.	R.E.M.	AV1	90.1	95.0	98.3	93.4	86.8	90.1
CONT.	R.E.M.	AV2	1.6	4.9	16.3	6.6	68.8	4.9
CONT.	R.E.M.	FAT	19.6	86.8	4.9	6.6	86.8	90.1
CONT.	R.E.M.	SAT	19.6	86.8	4.9	6.6	86.8	90.1
CONT.	D.A.R.	VT1&2	0.0	0.0	0.0	0.0	0.0	0.0
CONT.	D.A.R.	AV1	27.2	33.3	3.0	30.3	0.0	21.2
CONT.	D.A.R.	AV2	27.2	33.3	0.0	0.0	6.1	0.0
CONT.	D.A.R.	FAT	0.0	0.0	0.0	0.0	0.0	0.0
CONT.	D.A.R.	SAT	0.0	0.0	0.0	0.0	0.0	0.0
CONT.	J.M.P.	VT1&2	0.0	2.3	39.5	0.0	0.0	0.0
CONT.	J.M.P.	AV1	76.7	88.3	83.7	69.7	76.7	30.2
CONT.	J.M.P.	AV2	0.0	88.3	62.7	0.0	27.9	23.2
CONT.	J.M.P.	FAT	2.3	2.3	4.7	0.0	0.0	81.3
CONT.	J.M.P.	SAT	2.3	2.3	4.7	0.0	0.0	81.3
CONT.	J.P.S.	VT1&2	0.0	0.0	0.0	0.0	0.0	0.0
CONT.	J.P.S.	AV1	17.2	17.2	20.6	0.0	8.6	24.1
CONT.	J.P.S.	AV2	37.9	17.2	37.9	6.9	13.7	17.2
CONT.	J.P.S.	FAT	10.3	20.6	3.4	6.9	0.0	13.7
CONT.	J.P.S.	SAT	10.3	20.6	3.4	6.9	0.0	13.7
CONT.	A.J.S.	VT1&2	0.0	0.0	0.0	0.0	0.0	0.0
CONT.	A.J.S.	AV1	0.0	22.2	11.1	0.0	0.0	0.0
CONT.	A.J.S.	AV2	0.0	27.7	11.1	0.0	0.0	0.0
CONT.	A.J.S.	FAT	5.6	16.6	5.6	0.0	0.0	0.0
CONT.	A.J.S.	SAT	5.6	16.6	5.6	0.0	0.0	0.0
CONT.	F.C.	VT1&2	4.6	3.0	5.7	6.8	2.4	6.2
CONT.	F.C.	AV1	3.6	21.4	25.0	1.2	3.6	2.4
CONT.	F.C.	AV2	4.8	21.4	4.0	6.0	7.1	3.6
CONT.	F.C.	FAT	7.1	8.3	23.8	4.8	6.0	10.7
CONT.	F.C.	SAT	8.3	9.5	10.7	10.7	6.0	10.7
CONT.	R.S.R.	VT1&2	8.6	7.6	8.8	9.0	0.0	9.0
CONT.	R.S.R.	AV1	22.2	25.0	29.1	9.7	1.4	12.5
CONT.	R.S.R.	AV2	8.3	2.8	25.0	0.0	0.0	0.0
CONT.	R.S.R.	FAT	6.9	6.9	8.3	0.0	5.6	0.0
CONT.	R.S.R.	SAT	2.8	5.6	2.8	0.0	2.8	11.1
CONT.	F.G.S.	VT1&2	3.8	5.3	3.7	1.1	1.1	0.8
CONT.	F.G.S.	AV1	34.3	46.5	31.2	5.3	4.6	3.8
CONT.	F.G.S.	AV2	13.7	25.9	14.5	6.1	13.7	3.1
CONT.	F.G.S.	FAT	12.9	54.9	6.1	6.1	3.8	1.5
CONT.	F.G.S.	SAT	5.3	9.2	3.8	1.5	1.5	1.5
CONT.	H.W.S.	VT1&2	1.7	1.7	4.4	0.6	1.1	4.0
CONT.	H.W.S.	AV1	4.6	0.0	14.9	0.0	0.0	0.0
CONT.	H.W.S.	AV2	10.3	3.4	19.5	2.3	3.4	5.7
CONT.	H.W.S.	FAT	0.0	0.0	6.9	4.6	3.4	1.1
CONT.	H.W.S.	SAT	2.3	2.3	2.3	0.0	0.0	0.0

NEL TO SEXUAL DEVELOPMENT CATEGORIES:

A- No sexual development female
B- Partial sexual development fema
C- Full sexual development female
D- No sexual development male
E- Partial sexual development male
F- Full sexual development male

			% PENILE RESPONSE					
GROUP	SUBJECT	TEST	A	B	C	D	E	F
SO	G.E.D.	VT1&2	4.7	6.7	5.9	6.9	4.3	6.5
SO	G.E.D.	AV1	4.0	4.7	42.0	10.0	5.3	5.3
SO	G.E.D.	AV2	5.3	16.6	18.0	6.7	4.7	1.3
SO	G.E.D.	FAT	3.3	6.0	11.3	6.7	9.3	8.7
SO	G.E.D.	SAT	4.7	4.7	4.7	4.0	6.0	3.3
SO	W.G.M.	VT1&2	9.2	11.8	15.2	11.8	14.4	15.7
SO	W.G.M.	AV1	34.2	26.3	42.1	18.4	23.6	0.0
SO	W.G.M.	AV2	18.4	15.7	23.6	13.1	10.5	10.5
SO	W.G.M.	FAT	7.9	13.1	15.7	15.7	21.0	13.1
SO	W.G.M.	SAT	26.3	10.5	23.6	26.3	28.9	15.7
SO	J.P.1	VT1&2	2.9	5.9	2.0	4.9	7.8	3.9
SO	J.P.1	AV1	17.6	47.0	27.4	100.0	27.4	37.2
SO	J.P.1	AV2	27.4	56.8	15.6	31.3	60.7	21.5
SO	J.P.1	FAT	19.6	23.5	3.9	19.6	19.6	5.9
SO	J.P.1	SAT	19.6	23.5	3.9	19.6	19.6	5.9
SO	C.W.A.	VT1&2	10.7	46.4	58.9	32.1	10.7	10.7
SO	C.W.A.	AV1	50.0	71.4	100.0	21.4	28.5	28.5
SO	C.W.A.	AV2	21.4	50.0	85.7	42.8	71.4	35.7
SO	C.W.A.	FAT	14.2	35.7	50.0	0.0	14.2	42.8
SO	C.W.A.	SAT	28.5	14.2	50.0	0.0	7.1	35.7
SO	W.G.A.	VT1&2	52.3	21.4	19.0	59.5	33.3	11.9
SO	W.G.A.	AV1	4.8	66.6	0.0	61.9	28.5	0.0
SO	W.G.A.	AV2	52.3	19.0	0.0	61.9	0.0	0.0
SO	W.G.A.	FAT	61.9	28.5	14.2	100.0	33.3	38.0
SO	W.G.A.	SAT	0.0	42.8	4.8	52.3	42.8	0.0
SO	A.H.B.	VT1&2	0.0	0.0	12.5	9.4	0.0	6.3
SO	A.H.B.	AV1	37.5	18.7	37.5	18.7	25.0	12.5
SO	A.H.B.	AV2	12.5	0.0	31.2	18.7	18.7	31.2
SO	A.H.B.	FAT	18.7	18.7	31.2	25.0	25.0	6.3
SO	A.H.B.	SAT	18.7	18.7	25.0	18.7	18.7	31.2
SO	R.H.H.	VT1&2	21.4	42.8	21.4	42.8	0.0	35.6
SO	R.H.H.	AV1	0.0	42.8	42.8	28.5	0.0	28.5
SO	R.H.H.	AV2	14.2	42.8	14.2	14.2	57.1	14.2
SO	R.H.H.	FAT	42.8	57.1	28.5	71.4	100.0	57.1
SO	R.H.H.	SAT	85.7	71.4	71.4	71.4	28.5	28.5
SO	R.L.B.	VT1&2	1.6	4.3	41.8	0.0	0.0	0.0
SO	R.L.B.	AV1	69.5	93.4	83.6	33.6	25.0	5.4
SO	R.L.B.	AV2	83.6	92.3	92.3	16.3	22.8	4.3
SO	R.L.B.	FAT	86.9	84.7	23.9	6.5	11.9	0.0
SO	R.L.B.	SAT	7.6	25.0	89.1	7.6	6.5	8.7
SO	D.R.A.	VT1&2	2.9	3.7	2.2	0.0	3.7	0.0
SO	D.R.A.	AV1	52.9	86.7	79.4	35.2	83.8	89.7
SO	D.R.A.	AV2	88.2	94.1	7.4	14.7	97.0	7.4
SO	D.R.A.	FAT	5.9	29.4	20.5	22.0	91.1	5.9
SO	D.R.A.	SAT	25.0	22.0	0.0	2.9	0.0	0.0
SO	W.W.F.	VT1&2	5.3	5.3	10.5	0.0	2.6	0.0
SO	W.W.F.	AV1	57.8	73.6	10.5	10.5	0.0	0.0
SO	W.W.F.	AV2	78.9	100.0	21.0	31.5	0.0	0.0
SO	W.W.F.	FAT	36.8	42.1	15.7	21.0	36.8	47.3
SO	W.W.F.	SAT	21.0	26.3	21.0	21.0	10.5	0.0

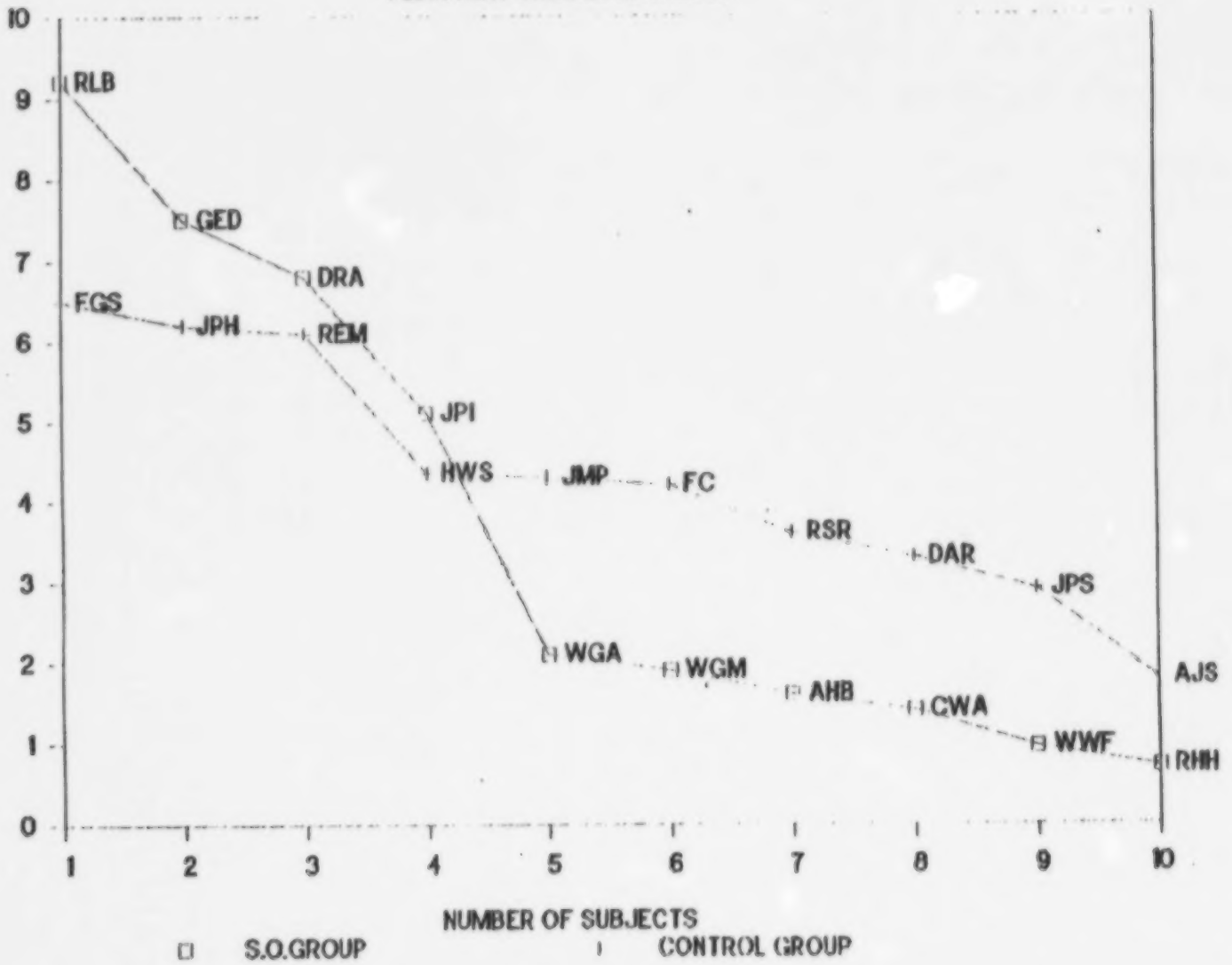
F.S.P.PROJECT

	GROUP	SUBJECT	PEAK RESPONSE PER CHART DIVISION FOR EACH SUBJECT
1	SO	RLB	9.20
2	SO	GED	7.50
3	SO	DRA	6.80
4	SO	JP1	5.10
5	SO	WGA	2.10
6	SO	WGM	1.90
7	SO	AHB	1.60
8	SO	CWA	1.40
9	SO	WWF	0.95
10	SO	RHH	0.70
A-MAX. RESPONSE:			9.20
B-MIN. RESPONSE:			0.70
C-MEAN RESPONSE:			3.73
D-STANDARD DEV:			2.97

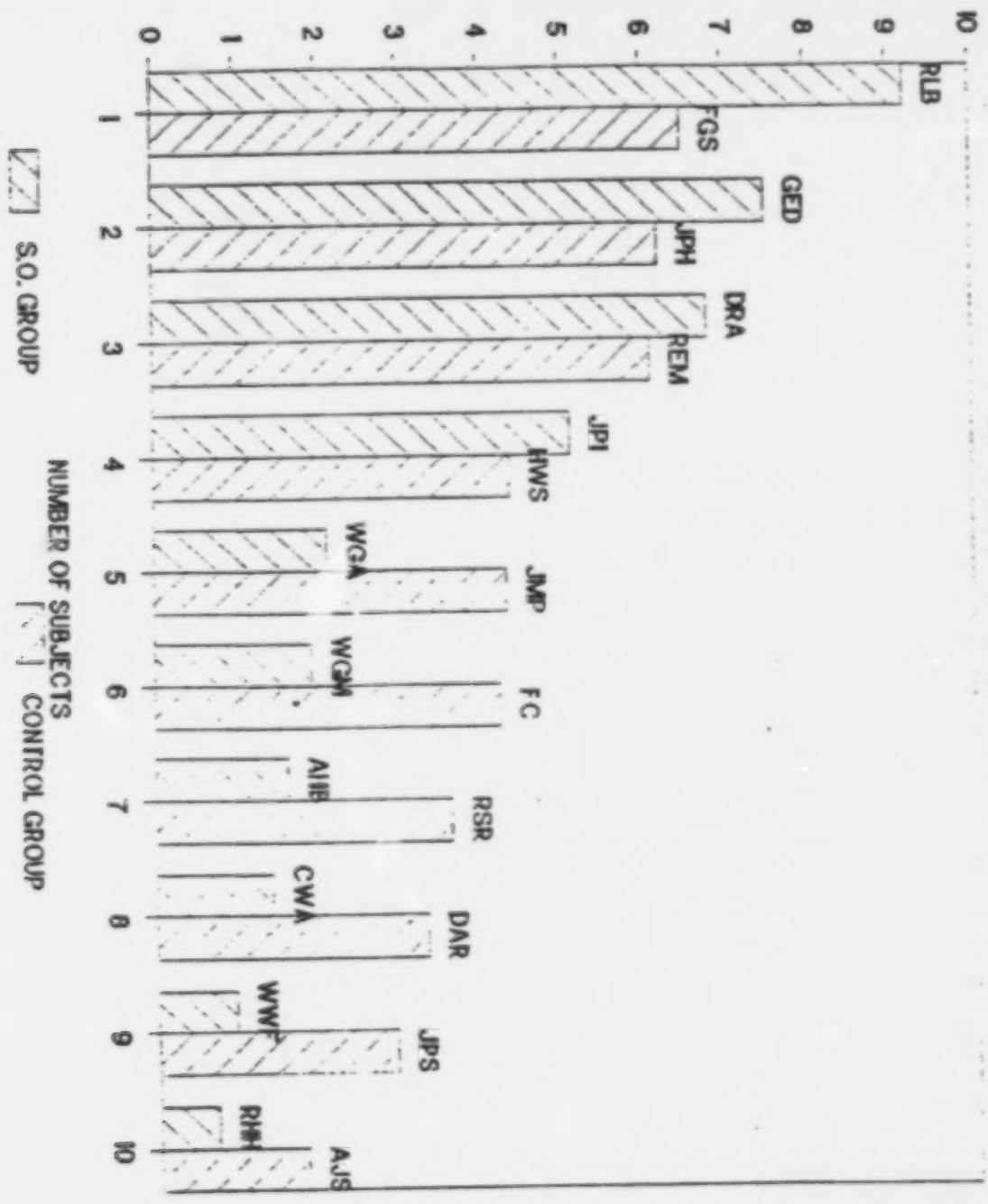
	GROUP	SUBJECT	PEAK RESPONSE PER CHART DIVISION FOR EACH SUBJECT
1	CONTR.	FGS	6.50
2	CONTR.	JPH	6.20
3	CONTR.	REM	6.10
4	CONTR.	HWS	4.35
5	CONTR.	JMP	4.30
6	CONTR.	FC	4.20
7	CONTR.	RSR	3.60
8	CONTR.	DAR	3.30
9	CONTR.	JPS	2.90
10	CONTR.	AJS	1.80
A-MAX. RESPONSE:			6.50
B-MIN. RESPONSE:			1.80
C-MEAN RESPONSE:			4.33
D-STANDARD DEV:			1.46

E.S.P. PROJECT

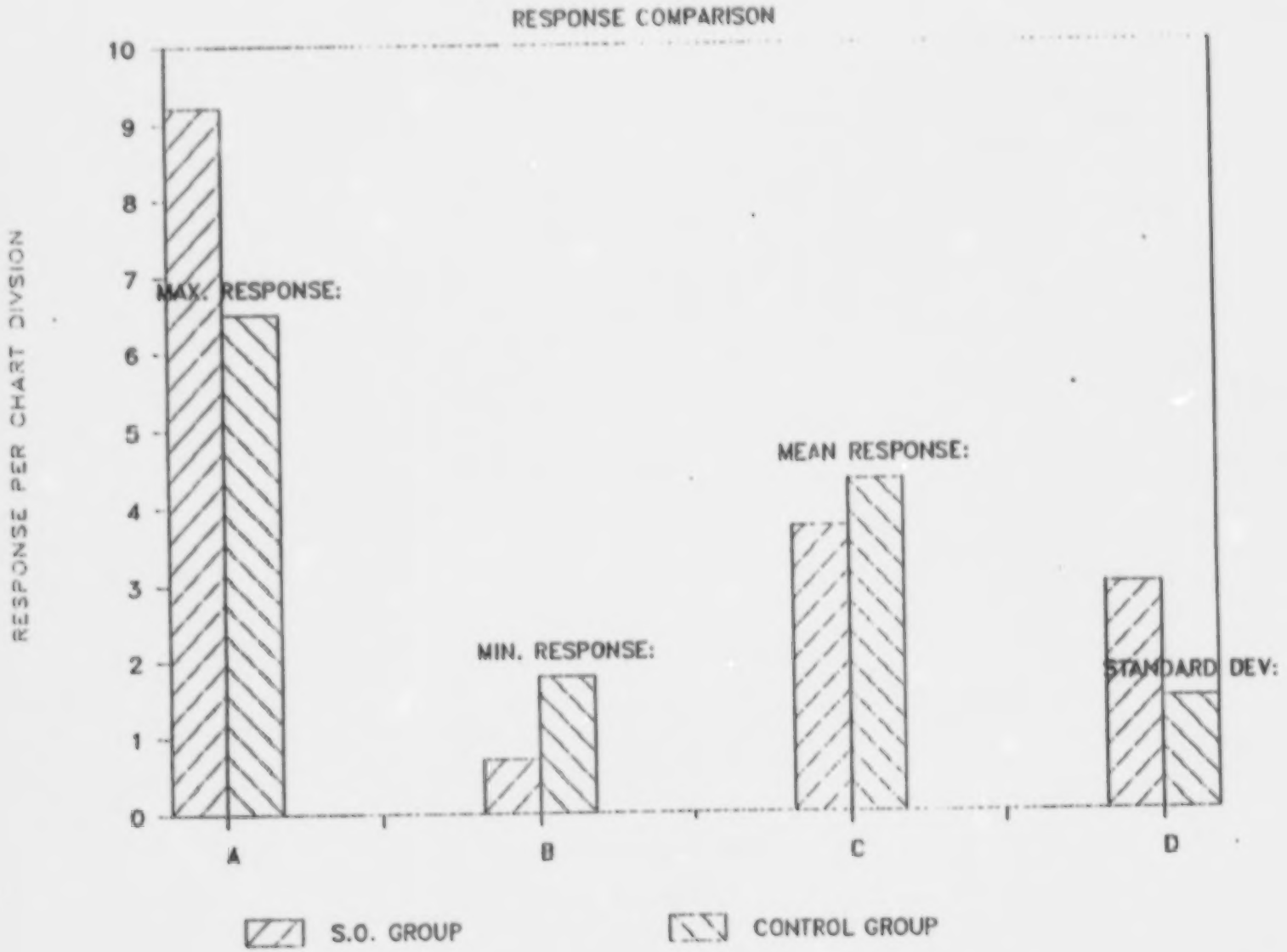
PEAK RESPONSE COMPARISON



SUBJECT PEAK RESPONSE (Chart Divisions)



F.S.P. PROJECT


RESPONSE COMPARISON
RESPONSE PER CHART DIVSION
10
9
8
7
6
5
4
3
2
1
0
MAX. RESPONSE:
MIN. RESPONSE:
MEAN RESPONSE:
STANDARD DEV:
A
B
C
D
S.O. GROUP
CONTROL GROUP

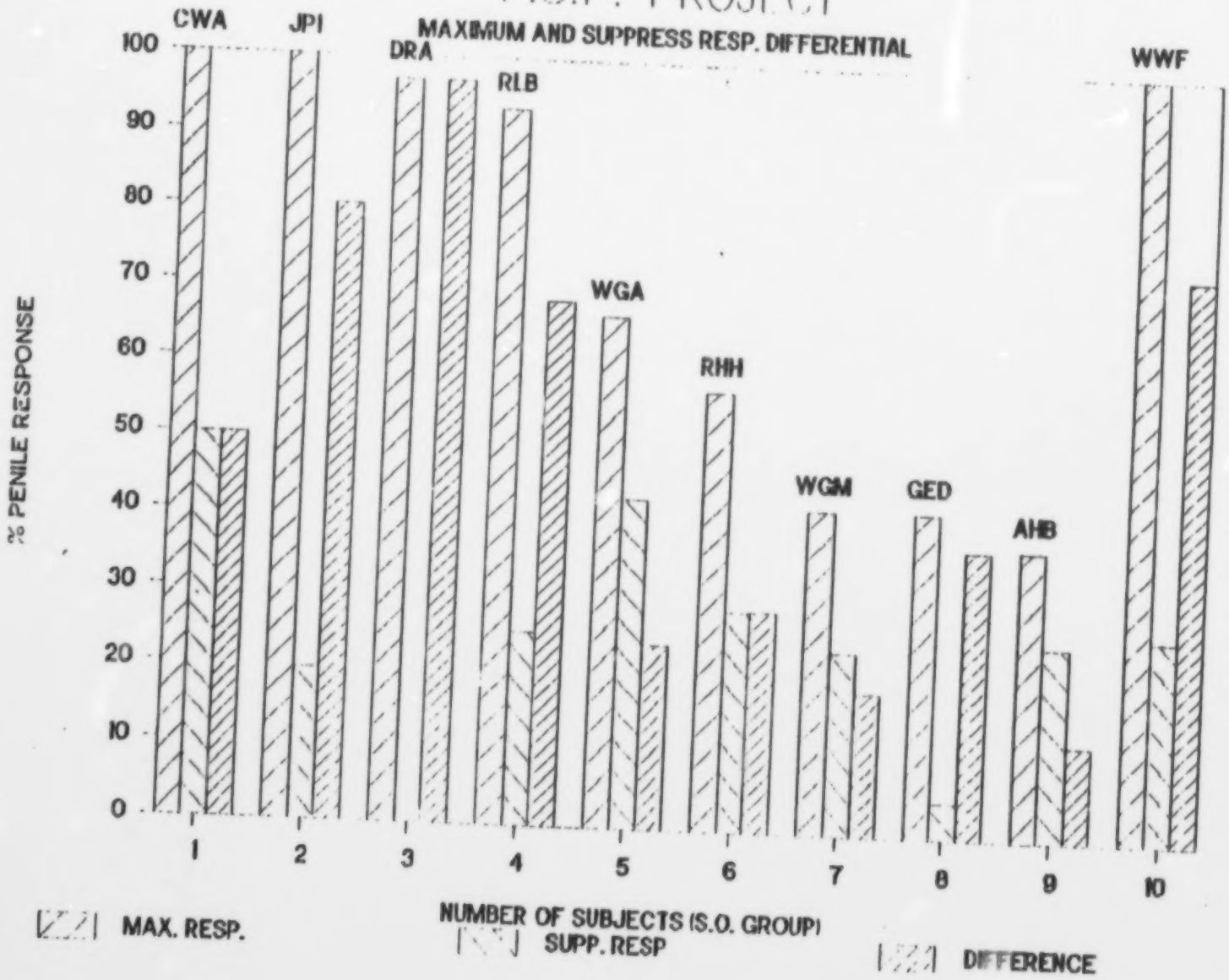
SEX OFFENDER GROUP

MAXIMUM RESPONSE FOR EACH OF THE FOUR TESTS	MAXIMUM RESPONSE FOR ALL FOUR TESTS	RESPONSE TO SAME SEXUAL DEVELOPMENT. CATEGORY IN THE SUPPRESS AROUSAL TEST	DIFFERENCE BETWEEN MAXIMU RESPONSE AND SUPPRESS AROUS RESPONSE
GED:			
6.9 VT1&2)			
42.0 AV1)	42.0 AV1 (C)	4.7	37.3
18.0 AV2)			
WGM:			
15.7 VT1&2)			
42.1 AV1)	42.1 AV1 (C)	23.6	18.5
23.6 AV2)			
JPL:			
7.8 VT1&2)			
100.0 AV1)	100.0 AV1 (D)	19.6	80.4
60.7 AV2)			
CWA:			
58.9 VT1&2)			
00.0 AV1)	100.0 AV1 (C)	50.0	50.0
85.7 AV2)			
WGA:			
59.5 VT1&2)			
66.6 AV1)	66.6 AV1 (B)	42.8	23.8
61.9 AV2)			
AHB:			
12.5 VT1&2)			
37.5 AV1)	37.5 AV1 (C)	25.0	12.5
31.2 AV2)			
RHH:			
42.8 VT1&2)			
42.8 AV1)	57.1 AV2 (E)	28.5	28.6
57.1 AV2)			
RLB:			
41.8 VT1&2)			
93.4 AV1)	93.4 AV1 (B)	25.0	68.4
92.3 AV2)			
DRA:			
3.7 VT1&2)			
89.7 AV1)	97.0 AV2 (E)	0.0	97.0
97.0 AV2)			
WWF:			
10.5 VT1&2)			
73.6 AV1)	100.0 AV2 (B)	26.3	73.7
00.0 AV2)			

VALUES STATED ARE IN PERCENT OF MAXIMUM RESPONSE.

LETTERS IN BRACKETS REFER TO THE SEXUAL DEVELOPMENT CATEGORIES.

I.S.P. PROJECT


MAXIMUM AND SUPPRESS RESP. DIFFERENTIAL
% PENILE RESPONSE
100
90
80
70
60
50
40
30
20
10
0
CWA
JPI
DRA
RLB
WGA
RHH
WGM
GED
AHB
WWF
1
2
3
4
5
6
7
8
9
10
NUMBER OF SUBJECTS (S.O. GROUP)
MAX. RESP.
SUPP. RESP
DIFFERENCE

CONTROL GROUP

MAXIMUM RESPONSE FOR EACH OF THE FOUR TESTS	MAXIMUM RESPONSE FOR ALL FOUR TESTS	RESPONSE TO SAME SEXUAL DEVELOPMENT. CATEGORY IN THE SUPPRESS AROUSAL TEST	DIFFERENCE BETWEEN MAXIMUM RESPONSE AND SUPPRESS AROUSAL RESPONSE
JPH:			
9.6 VT1&2)			
96.7 AV1)	96.7 AV1 (B)	72.5	24.2
0.0 AV2)			
REM:			
51.6 VT1&2)			
98.3 AV1)	98.3 AV1 (C)	4.9	93.4
68.8 AV2)			
DAR:			
0.0 VT1&2)			
33.3 AV1)	33.3 AV1&2 (B)	0.0	33.3
33.3 AV2)			
JMP:			
39.5 VT1&2)			
88.3 AV1)	88.3 AV1&2 (B)	2.3	86.0
88.3 AV2)			
IPS:			
0.0 VT1&2)			
24.1 AV1)	37.9 AV2 (A)	10.3	27.6
37.9 AV2)			
AJS:			
0.0 VT1&2)			
22.2 AV1)	27.7 AV2 (B)	16.6	11.1
27.7 AV2)			
FC:			
6.8 VT1&2)			
25.0 AV1)	25.0 AV1 (C)	10.7	14.3
21.4 AV2)			
RSR:			
9.0 VT1&2)			
29.1 AV1)	29.1 AV1 (C)	2.8	26.3
25.0 AV2)			
FGS:			
5.3 VT1&2)			
46.5 AV1)	46.5 AV1 (B)	9.2	37.3
25.9 AV2)			
HWS:			
4.4 VT1&2)			
14.9 AV1)	19.5 AV2 (C)	2.3	17.2
19.5 AV2)			

VALUES STATED ARE IN PERCENT OF MAXIMUM RESPONSE.

LETTERS IN BRACKETS REFER TO THE SEXUAL DEVELOPMENT CATEGORIES.

F.S.P. PROJECT

SEX OFFENDER GROUP

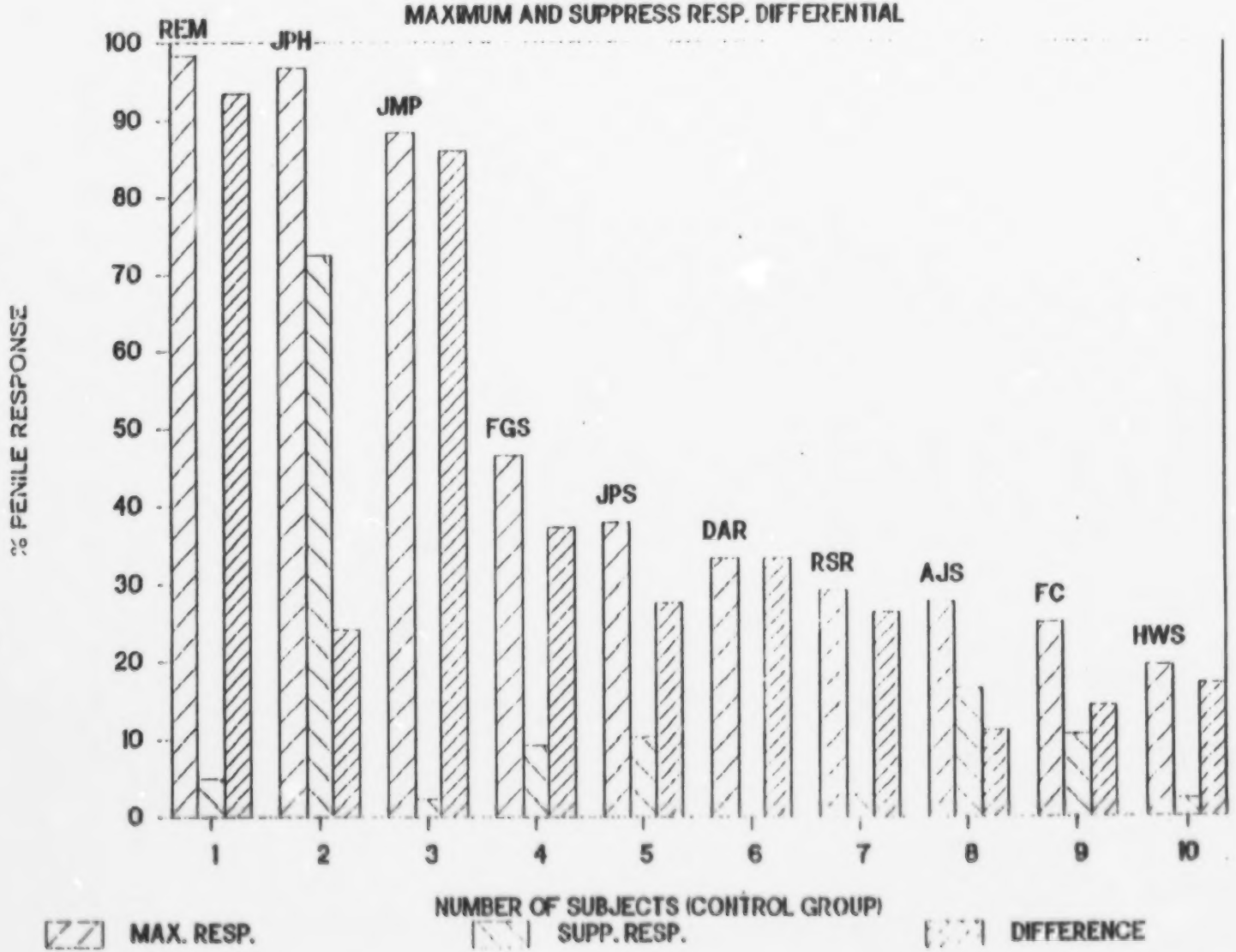
	SUBJECT	RESPONSE MAXIMUM DURING SUP- PRESS TEST		DIFFERENCE	
1	CWA	100.0	50	50.0	
2	JP1	100.0	19.6	80.4	
3	DRA	97.0	0	97.0	
4	RLB	93.4	25	68.4	
5	WGA	66.6	42.8	23.8	
6	RHH	57.1	28.5	28.6	
7	WGM	42.1	23.6	18.5	
8	GED	42.0	4.7	37.3	
9	AHB	37.5	25	12.5	
10	WWF	100.0	26.3	73.7	
		100.0	50.0	97.0	MAX.
		37.5	0.0	12.5	MIN
		73.6	24.6	49.0	MEAN
		25.8	14.2	27.8	STD. DEV

CONTROL GROUP

	SUBJECT	RESPONSE MAXIMUM DURING SUP- PRESS TEST		DIFFERENCE	
1	REM	98.3	4.9	93.4	
2	JPH	96.7	72.5	24.2	
3	JMP	88.3	2.3	86.0	
4	FGS	46.5	9.2	37.3	
5	JPS	37.9	10.3	27.6	
6	DAR	33.3	0.0	33.3	
7	RSR	29.1	2.8	26.3	
8	AJS	27.7	16.6	11.1	
9	FC	25.0	10.7	14.3	
10	HWS	19.5	2.3	17.2	
		98.3	72.5	93.4	MAX.
		19.5	0.0	11.1	MIN.
		50.2	13.2	37.1	MEAN
		29.8	20.4	27.5	STD. DEV.

F.S.P. PROJECT

MAXIMUM AND SUPPRESS RESP. DIFFERENTIAL



F.S.P. PROJECT

BACK BLADDER

DISTORTION EVENT COMPARISON

SEX OFFENDER GROUP

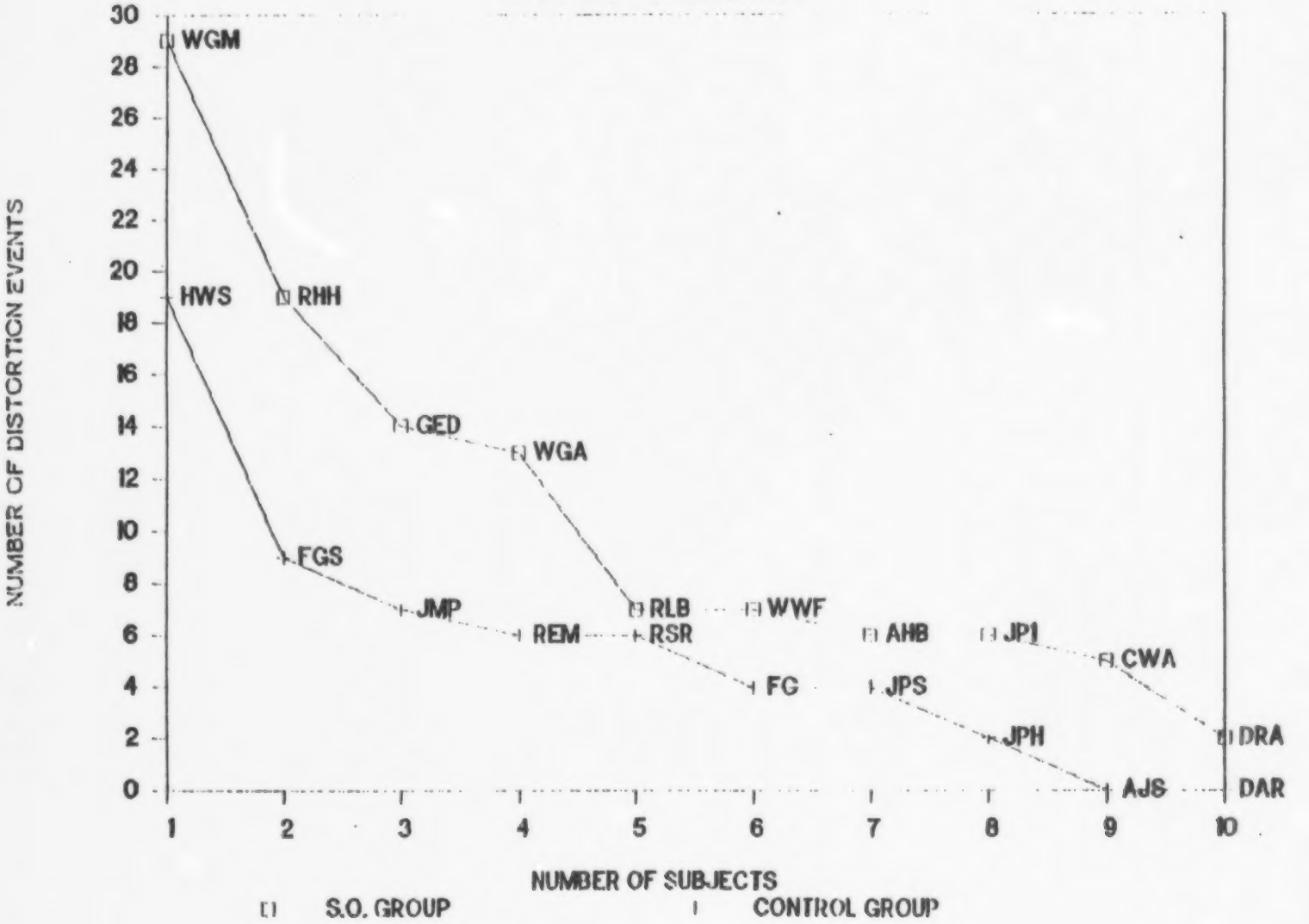
	SUBJECT	NUMBER OF DISTORTION EVENTS
1	WGM	29.0
2	RHH	19.0
3	GED	14.0
4	WGA	13.0
5	RLB	7.0
6	WWF	7.0
7	AHB	6.0
8	JP1	6.0
9	CWA	5.0
10	DRA	2.0
TOTAL:		108.0
MAXIMUM:		29.0
MINIMUM:		2.0
MEAN:		10.8
STD. DEV:		7.7

CONTROL GROUP

	SUBJECT	NUMBER OF DISTORTION EVENTS
1	HWS	19.0
2	FGS	9.0
3	JMP	7.0
4	REM	6.0
5	RSR	6.0
6	FC	4.0
7	JPS	4.0
8	JPH	2.0
9	AJS	0.0
10	DAR	0.0
TOTAL:		57.0
MAXIMUM:		19.0
MINIMUM:		0.0
MEAN:		5.7
STD. DEV:		5.2

F.S.P. PROJECT

BACK BLADDER DISTORTION



APPENDIX " C "

(Statistical Analysis)

DESCRIPTION OF THE STUDY GROUPS

The study group is composed of 10 normal controls from an offender population and 10 sex offenders. This sex offender group is composed of 5 pedophiles, 3 incest offenders, and 2 rapists.

Several variables were looked at to investigate the similarity of the groups on relevant variables and variables which are possible confounders. To compare interval or continuous measures such as age or Sexual Behaviour Inventory score, a t-test was used. To compare classification variables such as the number of people in each group with nonsexual criminal offenses, the Fischer's exact probability for the 2 x 2 contingency table was calculated.

Table 1

	CONTROLS	SEX OFFENDERS	
Sample Size	10	10	
Age	34.1 (11.5)	40.3 (10.9)	p = .23
# yrs Education	11.1 (2.0)	8.5 (3.2)	p < .01
# with nonsexual Criminal Offenses	10	7	P = .06
# Alcoholics	7	4	P = .18
Sex Behaviour Inv (# misclassific.)	5.3 (8.5)	2.0 (4.6)	p = .29
# Pedophilic statements endorsed	3.7 (3.7)	3.2 (3.4)	p = .76
Sex.Develop.Percep. Test (# errors)	1.9 (2.2)	1.2 (1.4)	p = .35

The three groups composing the sex offender group were compared on these same variables in order to check the homogeneity of the sample on important variables. One way ANOVAS were used to test the differences between the interval or continuous variables and Fischer's exact probability test was used to test the independence of the classification variables. It is recognised that lack of statistically significant differences does not prove similarity of the groups when such small sample sizes are involved. These comparisons are shown in the following table.

Table 2

	PEDOPHILES	INCEST	RAPISTS	
Sample Size	5	3	2	
Age	39.2 (8.7)	49.0 (10.6)	30.0 (9.9)	p = .15
# yrs Education	7.2 (3.7)	8.7 (2.3)	11.5 (0.7)	p > .25
# with nonsexual Criminal Offenses	4	1	2	P = .22
# Alcoholics	1	2	1	P = .46
Sexual Behaviour Inv (# misclassific.)	3.2 (6.6)	1.0 (1.0)	0.5 (0.7)	p = .76
# Pedophilic statements endorsed	4.8 (3.7)	2.3 (3.2)	0.5 (0.7)	p = .32
Sex.Develop.Percept Test (# errors)	1.4 (1.1)	2.3 (1.2)	0.0 (0.0)	p = .24

MAXIMUM SEXUAL RESPONSE

A fairly explicit heterosexual and a oral sex scene were shown in order to elicit the maximum sexual response for each person to be used as a controlling factor to their response on each of the test stimulus conditions. For several subjects, the maximum sexual response over the entire testing occurred to one of the audiovisual presentations of a person. The category to which the maximum sexual response occurred is shown below.

CATEGORY OF MAXIMUM SEXUAL RESPONSE

	NORMAL	PEDOPH-ILE	INCEST OFFEND	RAPIST	ROW TOTAL
FEMALE - PART DEV		1			1
FEMALE - FULLY DEV				1	1
MALE - UNDEVELOPED		2			2
MALE - PART DEVEL			1		1
HETEROSEXUAL SCENE	9	1	1	1	12
ORAL SEX SCENE	1	1	1		3
COLUMN	10	5	3	2	20

Given the difference in the strength of the stimuli of the pornographic scenes compared to the normal ausiovisual sequences, it was striking especially that three of the pedophiles showed their category of maximum response to the underdeveloped sequences. It was decided to test the independence of this relationship using a two way contingency table as follows.

CATEGORY OF MAXIMUM RESPONSE

		CONTROL	PEDOPH	TOTAL
CATEGORY OF MAX RESPONSE	UNDEVELOPED/ PART DEV	0	3	3
	PORNOGRAPH SCENE	10	2	12
	TOTAL	10	5	15

FISHER'S EXACT TEST (2-TAILED) p = .02198

Since this is a small sample size, Fisher's exact test is used to test the hypothesis of independence. This p value is the probability that a result at least this unlikely could be obtained if there is no difference in the response of the two groups to these different categories of material. We will reject the possibility that this could have occurred by chance if p is 5% or less.

The Maximum sexual response is then investigated to see if it is comparable across groups. The average and standard deviation for each group is as shown in the table below.

MAXIMUM SEXUAL RESPONSE BY GROUP

	MEAN	(STD DEV)	N
1 NORMAL	4.33	(1.54)	10
2 PEDOPHILE	4.84	(3.36)	5
3 INCEST OFFENDE-	3.37	(3.63)	3
4 RAPIST	1.50	(0.14)	2
ENTIRE POPULATION	4.03	(2.42)	20

MAXIMUM RESPONSE	MEAN	(STD DEV)	N
1 NORMAL	4.33	(1.54) *	10
2 SEX OFFENDER	3.73	(3.13)	10

* For the difference in variability between the normal and sex offender groups, Bartlett's Test of Homogeneity of Variance shows

s squared = pooled variance estimate = 6.081

T = 3.95122 distributed as Chi squared with 1 df under null hypothesis of no differences $p < .05$

This is therefore a significant difference in the variances

By looking at the data it is seen that the difference in the number of alcoholics in the two groups may be contributing to this difference in the maximum sexual response. The following table shows the maximum sexual response for each of the categories of alcoholism and group membership.

MAXIMUM RESPONSE BY ALCOHOLISM

MEAN (STD DEV)

	NORMAL	SEX OFFENDER	TOTAL
NOT ALC	4.47 (1.77)	5.38 (3.04)	5.08 (2.60)
ALCOHOLIC	4.27 (1.59)	1.25 (0.52)	3.17 (1.98)
TOTAL	4.33 (1.54)	3.73 (3.13)	4.03 (2.42)

SAMPLE SIZE

	NORMAL	SEX OFFENDER	
NOT ALC	3	6	9
ALCOHOLIC	7	4	11
	10	10	

This relationship was investigated using a two way analysis of variance using the factors group and alcoholism.

There was a significant difference in the variances between the sex offenders and the controls and it appears that the variances between the alcoholics and the non alcoholics in the sex offender group are also significantly different. Since equality of variances is a requirement of the ANOVA procedure, it was decided to analyse the effect of alcoholism and group membership on maximum response by using the logarithm of the maximum response variable. This is expected to produce much more closely related variances in the two groups.

LN(MAXIMUM RESPONSE)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
GROUP	2.003	1	2.003	7.024	.017 *
ALCOHOLISM	2.521	1	2.521	8.839	.009
2-WAY INTERACTIONS					
GROUP,ALCOHOLISM	1.819	1	1.819	6.378	.022 *
RESIDUAL	4.564	16	.285		

The significant interaction indicates that there is a different effect of alcoholism shown in the two groups. In order to look at the effect of alcoholism in each of these groups, a separate analysis was run looking at each group.

For controls, the following Anova table shows there is no effect of alcoholism in this group.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
ALCOHOLISM	0.010	1	.010	.057	.818
RESIDUAL	1.400	8	.175		

For sex offenders, the following table shows there is a significant effect of alcoholism.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
ALCOHOLISM	4.331	1	4.331	10.949	.011
RESIDUAL	3.164	8	.396		

Concerning the maximum sexual response, we therefore conclude that in the control group, alcoholism does not seem to make a significant difference in the maximum response produced ($p = .818$).

The maximum response for the controls is overall somewhat greater ($p = .017$). This is in spite of the fact that even the non alcoholics in this group are moderate drinkers or heavy drug users which may have an impairing effect on sexual response.

Within the sex offender group, there was significantly greater variability in maximum response (p .05) with the alcoholics in this group having significantly less response ($p = .011$). Due to the differences in variances, analyses of maximum response were done using a log transformation.

For each of the subsequent measures of sexual response, the percent of maximum response was used as the measure of response.

MEASUREMENT OF SEXUAL RESPONSE TO VISUAL AND AUDIOVISUAL CONDITIONS

The percent of maximum response was used as the measure of response to a series of visual stimuli and two repeated presentations of audiovisual stimuli. These were taken to assess the normal response of each subject to stimuli at three levels of sexual development and both genders. To see how closely related the visual and audiovisual presentations were, a correlation and predictive simple regression were run .

The correlation between the visual presentation of material on each of the conditions and the average of the two audiovisual conditions is fairly low (Pearson's correlation coefficient = .18).

The average response obtained on the audiovisual condition is much higher than that obtained on the visual material only. A regression equation to predict response to the visual condition from the response to the audiovisual condition gives a slope of from 0.04 to 0.14 points change in response to the visual material (95% confidence interval) for each change of 1 point in response to the audiovisual material.

There is also a moderate correlation between the two audiovisual conditions (rxy = .53). This is highly significant (p .0005).

The amount of agreement between the two repeats of each audiovisual condition will be estimated using the intraclass correlation coefficient, a measure similar to a Pearson's correlation except that it estimates the agreement of the two measures requiring that they agree exactly, since there is no expectation of a systematic change from one repeat to the next. The BMDP 2V repeated measures ANOVA program was used to produce the following table

		MEAN (STD DEV)
AV1	1	31.63 (30.71)
AV2	2	23.08 (26.37)
MARGINAL		27.35
COUNT		114

ANOVA FOR RELIABILITY OF ONE AUDIOVISUAL MEAS

SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROB.
MEAN	170598.339	1	170598.339	136.55	.0000
1 ERROR(bet p)	141180.400	113	1249.384		
WITHIN PEOPLE	48156.279	114	422.421		
AV	4166.842	1	4166.842	10.70	.0014
2 ERROR	43989.437	113	389.287		

We should note that in fact, the two repeats do seem to deviate systematically. The first set of measurements AV1 shows significantly greater response (32% + 31% of maximum response) as compared to 23% + 26% for the second measurement. The raises the possibility of a general lowering of response through the testing (habituation ?)

From Winer, the estimate of the reliability of this measure

$$\theta = \frac{\text{MS bet people - MS w people}}{2\ (\text{MS w people})} = \frac{1249.384 - 422.421}{2 \times 422.421} = 0.97883$$

The reliability of a single measure $r = \frac{\theta}{1+\theta} = 0.4946$

The reliability of the average of 2 measures is $r = \frac{2\theta}{1+2\theta} = 0.6619$

This correlation indicates that the reliability of one measurement of response to an audiovisual stimulus is not sufficient to use as an outcome measure. The two conditions will be therefore averaged together to give a better estimate of the true response to each of the conditions and this average response is used in each of the subsequent analyses.

To see the effect of averaging more repeats, we see that
reliability of avg of 3 repeats = .7459
reliability of avg of 4 repeats = .7966
reliability of avg of 5 repeats = .8303

If a set criteria of reliability of .75 or .80 might be desired in future research, this might be obtained by averaging more repeats of the testing.

DISTORTION EVENTS

Along with the measurement of the sexual response to each of the audiovisual stimuli, a back pressure cuff in the chair of the subject measured movements or pressures of the subject as his response was being measured. It was hoped that analysis of these measurements would enable detection of manipulation to produce response to desired categories or 'fidgeting' to help suppress response. There was not a sufficient body of data to analyse the occurrence of these distortions detected to see if they occurred with response or in the lack of response and when the subject was trying to produce or suppress a response.

The total number of distortion events for each person throughout the procedure was counted several grouping variables were used to see if there were outstanding differences in their totals of these events.

DISTORTIONS

	Mean	(Std dev)	N
CONTROLS	5.70	(5.52)	10
PEDOPHILE	7.00	(3.94)	5
INCEST OFF	20.67	(7.64)	3
RAPISTS	5.50	(0.71)	2

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
GROUP	550.483	3	183.494	6.477	.005 *
RESIDUAL	453.267	16	28.329		

There is a significant difference among the groups which is accounted for by the large number of distortions in the incest offender group. It is hard to interpret this finding since it is based on such a small number of subjects.

Comparing normals to sex offenders as a group, there is no difference in the number of distortion events.

NORMALS	5.70	(5.52)	T-Test	t = -1.64 p = .119
SEX OFFEND	10.80	(8.16)		

Comparing also alcoholics to non alcoholics, there is no difference shown in the number of distortion events.

ALCOHOLIC	9.13	(5.62)	T-Test	t = 0.43 p = .672
NON ALCOHOL	7.67	(8.38)		

PATTERN OF RESPONSE TO AUDIOVISUAL MATERIAL

It was expected that the sex offenders should show a different pattern of sexual response to the categories of sexual development and gender. In order to look at this pattern of response, an analysis of variance was run comparing controls to sex offenders and comparing their responses to male and female material and undeveloped, partially developed and fully developed material. A repeated measures design using BMDP 2V was run.

The mean and standard deviations of the percent of maximum response for each of the conditions is shown below. The average of the two audiovisual conditions is used for each condition.

MEAN (STD DEV)		CONTROLS	SEX OFFENDERS	TOTAL
FEMALE	UNDEVELOPED	28.0 (26.4)	36.5 (26.1)	32.2
	PART DEVELOP	38.3 (31.5)	50.9 (31.8)	44.6
	FULLY DEVEL	28.8 (21.7)	38.7 (29.7)	33.7
MALE	UNDEVELOPED	17.7 (21.8)	27.8 (16.5)	22.7
	PART DEVELOP	20.5 (27.4)	28.1 (27.7)	24.3
	FULLY DEVEL	20.0 (25.4)	16.6 (16.6)	18.3
	MARGINAL	25.5	33.1	29.3
	COUNT	10	10	20

	TOTAL		TOTAL
FEMALE	36.8 (27.7)	UNDEVELOPED	27.5 (22.8)
MALE	21.8 (22.4)	PART DEVELOP	34.4 (30.0)
		FULLY DEVEL	26.0 (24.0)

ANOVA OF AVERAGE RESPONSE FOR CONTROLS VS SEX OFFENDERS

	SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROB.	
	GRP	1717.633	1	1717.633	.70	.413	
1	ERROR	44185.045	18	2454.724			
	SEX	6846.339	1	6846.339	13.51	.001	*
	SG	231.296	1	231.296	.46	.507	
2	ERROR	9121.894	18	506.771			
	DEV	1618.202	2	809.101	3.31	.047	*
	DG	277.390	2	138.695	.57	.571	
3	ERROR	8786.721	36	244.075			
	SD	587.916	2	293.958	1.16	.326	
	SDG	278.330	2	139.165	.55	.583	
4	ERROR	9157.127	36	254.364			

Overall, both groups prefer females (p=.001 , SEX factor) and the pubescent group (p=.047 , DEV factor).

There is no difference in the overall response between the two groups (GRP factor) or the pattern of response in the two groups (DG interaction, SG interaction or SDG interaction).

Since the hypothesis of a different response to undeveloped stimuli and males as well as females related specifically to pedophiles as opposed to rapists or incest offenders, the pedophile group was separated out and compared to the controls.

The average percent of maximum response is as shown below.

MEAN (STD DEV)		CONTROLS	PEDOPHILES	TOTAL
FEMALE	UNDEVELOPED	27.8 (26.4)	53.3 (25.6)	36.4
	PART DEVELOP	38.3 (31.5)	72.9 (23.7)	49.9
	FULLY DEVEL	28.8 (21.7)	33.7 (34.1)	30.4
MALE	UNDEVELOPED	17.7 (21.8)	36.3 (18.9)	23.9
	PART DEVELOP	20.5 (27.4)	31.7 (37.6)	24.2
	FULLY DEVEL	20.0 (25.4)	16.5 (21.6)	18.8
	MARGINAL	25.5	40.7	30.6
	COUNT	10	5	15

	TOTAL		CONTROLS	PEDOPHILES	TOTAL
FEMALE	38.9 (28.9)	UNDEVELOP	22.8 (23.8)	44.8 (22.1)	33.8
MALE	22.3 (25.0)	PART DEVE	29.4 (29.4)	52.3 (33.4)	42.5
		FULLY DEV	24.4 (23.2)	25.1 (27.6)	24.9

ANOVA OF AVERAGE RESPONSE FOR CONTROLS VS PEDOPHILES

	SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROB.
	GRP	4625.867	1	4625.867	1.71	.214
1	ERROR	35242.552	13	2710.965		
	SEX	7017.505	1	7017.505	11.71	.005 *
	SG	819.626	1	819.626	1.37	.263
2	ERROR	7792.833	13	599.448		
	DEV	3475.475	2	1737.737	9.74	.001 *
	DG	2096.303	2	1048.151	5.87	.008 *
3	ERROR	4640.703	26	178.488		
	SD	1177.230	2	588.615	2.17	.135
	SDG	283.953	2	141.976	.52	.599
4	ERROR	7061.828	26	271.608		

Overall, both groups prefer females (p=.005 , SEX factor).

The pedophile and control groups show a different pattern of response regarding the sexual development of the persons in the audiovisual material (p = .008 , DG interaction). This means that the response to different developmental levels must be looked at in each group separately.

The analysis for controls alone is as follows

AVERAGE % MAXIMUM RESPONSE

	FEMALE		MALE			
UNDEVELOP	28.0	(26.4)	17.5	(21.8)	22.8	(23.8)
PART DEVEL	38.3	(31.5)	20.5	(27.4)	29.4	(29.4)
FULLY DEV	28.8	(21.7)	20.0	(25.4)	24.4	(23.2)
	31.7	(26.1)	19.4	(24.1)	25.5	

	SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROB.
	SEX	2280.432	1	2280.432	17.30	.002
2	ERROR	1186.558	9	131.839		
	DEV	471.012	2	235.506	1.92	.175
3	ERROR	2204.483	18	122.471		
	SD	236.271	2	118.135	.52	.605
4	ERROR	4118.311	18	228.795		

There is no significant difference in the response to different sexual categories for controls.

For the pedophiles, the following analysis is run

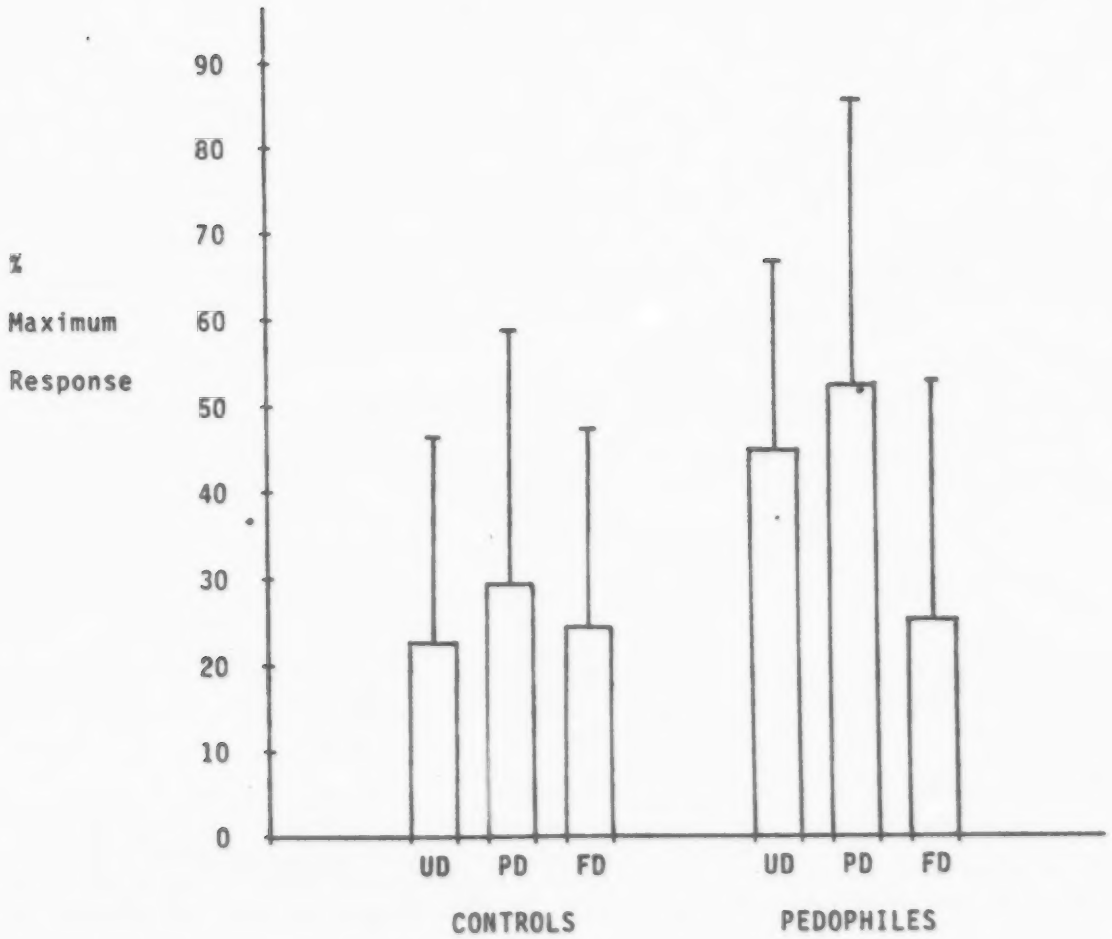
AVERAGE RESP FOR PEDOPHILES

MEAN (STD DEV)	FEMALE	MALE	MARGINAL
UNDEVELOPED	53.3 (25.6)	36.3 (18.9)	44.8 (22.1)
PART. DEVELOPED	72.9 (23.7)	31.7 (37.6)	52.3 (33.4)
FULLY DEVELOPED	33.7 (34.1)	16.5 (21.6)	25.1 (27.6)
	53.0 (29.2)	28.2 (26.3)	40.7

	SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROB.
	SEX	4737.632	1	4737.632	2.87	.165
2	ERROR	6606.275	4	1651.568		
	DEV	3943.327	2	1971.663	6.47	.021 *
3	ERROR	2436.220	8	304.527		
	SD	977.752	2	488.876	1.33	.317
4	ERROR	2943.516	8	367.939		

Therefore we see that when this is analysed separately, the controls show no different response with the changing development, whereas the pedophiles prefer the younger age groups (p = .021)

PATTERN OF SEXUAL RESPONSE



SUPPRESSING SEXUAL RESPONSE TO A CHOSEN CATEGORY

This procedure of testing sexual response is used as a measure in treatment programs and is seen as a more reliable measure of the sexual tendencies of the person than direct or indirect questions. The ability of this population to suppress their sexual response to inappropriate material or to produce a 'faked' response to stimuli of persons who they are not really attracted to, is thus of concern. In order to test for this ability, each person was asked to choose a category of stimulus to which they were attracted and to suppress their response to that category. The categories chosen by each group are as in the following table.

CATEGORY CHOSEN TO SUPPRESS	CONTROL	PEDOPHILE	INCEST OFFEND	RAPIST
UNDEVELOPED FEMALE		3		
FULLY DEVELOPED FEMALE	9	2	2	2
	9 *	5	3 *	2

* note - one incest offender chose a neutral condition to suppress the suppression testing was invalid for one control

The sex offenders did not all chose the category to which they were expected to have the maximum response. The comparison of their response under the average of the two normal conditions and the suppressing condition is as shown below.

MEAN (STD DEV)	AVERAGE RESPONSE	SUPPRESSING RESP	N
NORMAL	31.97 (19.49)	7.47 (8.44)	9
PEDOPHILE	37.46 (24.12)	9.64 (10.22)	4
INCEST OFFENDE	31.45 (2.05)	14.15 (13.36)	3
RAPIST	63.60 (41.30)	37.55 (17.68)	2
ENTIRE POPULATION	36.88 (23.23)	12.15 (13.29)	18

When the sex offenders are combined into one group, the following results are seen with respect to their chosen groups and the change in response.

CONTROLS COMPARED TO ENTIRE SEX OFFENDER GROUP

CATEGORY CHOSEN	CONTROLS	SEX OFFENDERS
UNDEVELOPED FEMALE		3
FULLY DEVELOPED FEMALE	9	6
	9 *	9 *

* note - one incest offender chose a neutral condition to suppress the suppression testing was invalid for one control

MEAN (STD DEV)	AVERAGE RESPONSE	SUPPRESSING RESP	N
NORMAL	31.97 (19.49)	7.467 (8.44)	9
SEX OFFENDER	41.58 (28.99)	33.122 (30.45)	9
ENTIRE POPULATION	36.52 (24.24)	20.294 (25.38)	18

This change in response was analysed for the suppression of response as well as difference between the groups using the BMDP 2V repeated measures ANOVA package. The following results were shown.

ANOVA OF SEXUAL RESPONSE ON CONDITION CHOSEN TO SUPPRESS

BETWEEN SUBJECTS EFFECT - GROUP (CONTROLS VS SEX OFFENDERS)
WITHIN SUBJECTS EFFECT - SUPPRESS

SOURCE	SS	DF	MS	F	P
GROUP	853.61	1	853.61	1.93	.1837
ERROR	7072.70	16	442.04		
SUPPRESS	5503.16	1	5503.16	20.74	.0003 *
SUPP X GROUP	1.24	1	1.24	.00	.946
ERROR	4246.13	16	265.38		

There is a significant ability to suppress the sexual response shown in both groups (p = .0003 , SUPPRESS factor).

There is no significant difference between the groups in their amount of response overall (p = .1837 , GROUP factor).

There is no significant difference between the groups in their ability to suppress sexual response (p = .9462 , SUPP x GROUP factor).

RESPONSE TO CATEGORY OF MAXIMUM RESPONSE UNDER SUPPRESSING CONDITION

Since not all subjects chose a category which they had the largest response to, the suppression of response to the category of maximum response on the normal set of AV conditions was also looked at. These categories and the average and suppressing response were as follows for each of the groups.

CATEGORY OF MAXIMUM RESPONSE	CONT-ROL	PEDOPH-ILE	INCEST OFFEND	RAPIST
PARTIALLY DEVELOPED FEMALE	5	3	2	0
FULLY DEVELOPED FEMALE	3	0	1	2
UNDEVELOPED MALE	0	2	0	0
PARTIALLY DEVELOPED MALE	1	0	0	0
	9	5	3	2

* note : the suppression testing was invalid for one control

	AVERAGE RESPONSE		SUPPRESSING RESP		N
NORMAL	46.56	(31.58)	22.82	(32.76)	9
PEDOPHILE	79.56	(14.52)	29.04	(13.26)	5
INCEST OFFENDE	35.23	(6.71)	33.23	(34.38)	3
RAPIST	63.60	(41.29)	37.50	(17.68)	2
ENTIRE POPULATION	55.24	(29.43)	27.65	(26.32)	19

When the sex offenders are grouped together, the categories of maximum response and the average and suppressing responses are as follows.

CONTROLS COMPARED TO SEX OFFENDERS

CATEGORY OF MAXIMUM RESPONSE	CONTROLS	SEX OFFENDERS
PARTIALLY DEVELOPED FEMALE	5	4
FULLY DEVELOPED FEMALE	3	4
UNDEVELOPED MALE	0	2
PARTIALLY DEVELOPED MALE	1	0
	9 *	10

* note : the suppression testing was invalid for one control

MEAN (STD DEV)	AVERAGE RESPONSE		SUPPRESSING RESP		N
NORMAL	46.55	(31.58)	22.82	(32.76)	9
SEX OFFENDER	63.07	(26.51)	31.99	(19.69)	10
ENTIRE POPULATION	55.24	(28.76)	27.65	(26.32)	19

When these results were analysed, again with the BMDP ANCVA procedure, the following results were produced.

ANOVA OF SEXUAL RESPONSE ON CONDITION OF MAXIMUM RESPONSE
FOR REGULAR CONDITION AND SUPPRESSING CONDITION

BETWEEN SUBJECTS EFFECT - GROUP (CONTROLS VS SEX OFFENDERS)
WITHIN SUBJECTS EFFECT - SUPPRESS

SOURCE	SS	DF	MS	F	P
GROUP	1562.15	1	1562.15	1.38	.255
ERROR	18509.70	17	1088.81		
SUPPRESS	7115.92	1	7115.92	16.81	.0007 *
SUPP X GROUP	127.83	1	127.83	.30	.590
ERROR	7197.13	17	423.36		

There is a significant ability to suppress the sexual response shown in both groups ($p = .0007$, SUPPRESS factor).

There is no significant difference between the groups in their amount of response overall ($p = .255$, GROUP factor).

There is no significant difference between the groups in their ability to suppress sexual response ($p = .590$, SUPP x GROUP factor).

FAKING SEXUAL RESPONSE TO A CHOSEN CONDITION

The ability to 'fake' a response was tested by asking the subjects to again chose a condition to which they were not attracted and attempt to produce a response to that condition.

The categories chosen by each of the groups and the response under the normal and the 'faking' condition are as follows.

CATEGORY CHOSEN TO FAKE	CONT-ROL	PEDOPH-ILE	INCEST OFFEND	RAPIST
FEMALE - UNDEVELOPED	1	1	3	0
FEMALE - PART DEVELOPED	4	2	0	0
FEMALE - FULLY DEVELOPED	0	0	0	2
MALE - UNDEVELOPED	1	1	0	0
MALE - PART DEVELOPED	1	1	0	0
MALE - FULLY DEVELOPED	3	0	0	0
	10	5	3	2

In looking at these chosen categories, one notices that the sex offender group all chose categories to 'fake' a response to which they are not actually attracted. This may have occurred because they were uncertain of the task or because they were not co-operating or unwillingness to admit openly to which groups they are attracted. The control group chose more appropriate categories implying they understood the task better or were co-operating more.

MEAN (STD DEV)	AVERAGE RESPONSE		FAKING RESPONSE		N
NORMAL	24.16	(30.53)	35.46	(37.44)	10
PEDOPHILE	49.12	(33.08)	33.68	(30.16)	5
INCEST OFFENDE	12.70	(11.84)	18.00	(21.60)	3
RAPIST	26.95	(7.28)	24.55	(25.81)	2
ENTIRE POPULATION	28.96	(29.17)	31.08	(30.96)	20

When the sex offenders were combined into one group, the categories chosen to fake and the responses are as follows.

CONTROLS COMPARED TO ENTIRE SEX OFFENDER GROUP

CATEGORY CHOSEN	CONTROLS	SEX OFFENDERS
FEMALE - UNDEVELOPED	1	4
FEMALE - PART DEVELOPED	4	2
FEMALE - FULLY DEVELOPED	0	2
MALE - UNDEVELOPED	1	1
MALE - PART DEVELOPED	1	1
MALE - FULLY DEVELOPED	3	0
	10	10

CONTROLS COMPARED TO SEX OFFENDERS

MEAN (STD DEV)	AVERAGE RESPONSE		FAKING RESPONSE		N
NORMAL	24.16	(30.53)	35.46	(37.44)	10
SEX OFFENDER	33.76	(28.51)	27.15	(25.20)	10
ENTIRE POPULATION	28.96	(29.17)	31.08	(30.96)	20

The ability fo 'fake' and differences between the groups were tested again using the BMDP 2V Anova procedure.

ANOVA OF FAKING SEXUAL RESPONSE ON CHOSEN CONDITION

BETWEEN SUBJECTS EFFECT - GROUP (CONTROLS VS SEX OFFENDERS)
WITHIN SUBJECTS EFFECT - FAKE

SOURCE	SS	DF	MS	F	P
GROUP	2.59	1	2.59	.00	.968
ERROR	26465.03	17	1556.77		
FAKE	13.03	1	13.03	.04	.846
FAKE X GROUP	573.84	1	573.84	1.72	.207
ERROR	5675.33	17	333.84		

There is overall no ability shown to 'fake' sexual response ($p = .846$, FAKE factor).

There is no significant difference between the groups in their amount of response overall ($p = .968$, GROUP factor).

There is no significant difference between the groups in their ability to fake response ($p = .207$, FAKE x GROUP factor).

The difference in choice of categories to fake a response to between the control group and the sex offender group also produce a problem in interpreting these results.